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ABSTRACT

This Alberta (Canada) guide highlights the practical connections among results-based or outcome-based, continuous progress, and integrated curricula. It describes effective educational efforts and beliefs that accommodate differences in learning and promote learning success, and invites administrative and teaching staff to participate in collaborative discussions and efforts that promote learning success for all students. The strategies described provide a practical look at how learner success can be encouraged within the framework of continuous progress, high expectations, standards, appropriate time, and support for learning. The first eight chapters contain a topical discussion, a list of sources for that topic, and a "reflection section" that provides questions for discussion and reflection. The eight chapters are: (1) "Developing the Vision: Clarifying Our Beliefs about Teaching and Learning"; (2) "What Constitutes Learning Success for Each Child?"; (3) "Contexts for Learning"; (4) "Identifying Learner Strengths in Planning Next Steps"; (5) "Instructional Practices that Promote Continuous Learning"; (6) "Assessing Learning Progress"; (7) "Reporting Learning Growth"; and (8) "Home and School Connections." Chapter 9 contains teachers' stories, and chapter 10 offers a summary and implications. Contains approximately 75 references. Eighteen appendixes include planning and criteria sheets, forms, assessment tools, and learning and instructional profiles. (TJQ)

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Accommodating Differences in Elementary School

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A Note from Alberta Education

It is with great pleasure that Alberta Education makes available this document *Every Child Can Learn: Accommodating Differences in Elementary School.* From their classroom experiences, teachers of the Fort McMurray Catholic Schools, under the leadership of Phyllis Geddert, provided content and photographs which illustrate the efforts they make on behalf of their students. Their commitment to the success of ***every*** student is clear.

By making this document available to schools beyond the Fort McMurray Catholic Schools, Alberta Education hopes to enable educators throughout the province to benefit from the work of their colleagues in Fort McMurray.

Susan Lynch
Assistant Director
ECS/Elementary Unit
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An Introductory Note from Teachers to Teaching Colleagues

In 1988, *Education Program Continuity: A Policy Statement on the Articulation of Children's Learning Experiences, Early Childhood Services Through Grade Six*, identified ways in which continuity for each child's learning could be enhanced:

- *learning and achievement objectives that lead, one from the other, logically, sequentially and in a form that can be easily adapted to meet the needs of children*
- *instructional techniques that:*
  - *enable learners to interact with each other*
  - *respect the educational needs of each child*
  - *permit each child to function in accordance with preferred modes/strategies of learning*
- *a wide variety of methods used to evaluate children's progress, and*
- *flexible administrative practices carried out through a partnership among instructional staff, program administrators, parents and community resource persons.*

Resource materials that identified learning links from ECS to Grade 6 were developed, and portrayed the importance of connecting the various components of learning and schooling in the effort to accommodate each child's learning needs (*Program Continuity: Elementary Education in Action,* Alberta Education, 1990).

The Minister's *Vision for the nineties . . . a plan of action,* 1991, emphasizes the importance of excellence in curriculum as a component of the vision. The focus for an excellent curriculum is on success for all students through a results-based, levels-organized or continuous progress, and an integrated curriculum.

Learning is continuous and dynamic and requires, by its nature, that teachers provide learning environments that encourage each child's natural curiosity and desire to learn. At the same time, being aware of what is important for students to know, do and be inclined to do (knowledge, skills and attitudes), is critical in promoting success for all students. Through our knowledge of learning results, a child's next learning steps can be encouraged and planned. This is not to say that a clear linear path can be detected in the learning process, but, through assessments of learning, growth can be observed, documented and celebrated.

The strategies we describe will provide a practical look at how learner success can be encouraged and promoted within the framework of continuous progress, high expectations, standards, appropriate time and support for learning. Teachers have noted an increase in students' confidence in their own learning ability through the implemented beliefs and processes. Teachers have found that successful learning connections for students occur when:

- educators believe that all students can learn well, but not necessarily at the same time or in the same way
- beliefs about learning are clearly articulated and shared by parents, students and teachers
- the essential learning or intended outcomes (knowledge, skills and attitudes), which all students are expected to demonstrate, are clearly identified and defined in terms of student performance
- a safe and positive learning climate exists in the school and classrooms
- parents and teachers work together to communicate and plan strategies that will assist a child's learning progress
- students understand clearly what is to be learned, how it can be learned, and how it ties in with their previous meaningful learning and personal interests
- the time and appropriate support for learning are provided for each student within and across levels
- students are active partners in the learning process
- instruction and assessments match essential learner goals or intended outcomes
- teachers collaboratively share ideas within and across levels to make continuous improvements, based on the results of student learning
- each child's continuous learning achievements are observed and documented
- continuous learning records accompany each student from teacher to teacher and from school to school.

As teachers, we believe that all students can learn, but not all in the same way or at the same rate. We know that learning success at one level best promotes success at the next level. We also firmly believe that we make a significant difference in promoting learner success.

We hope you will find this document helpful as you discuss ways to motivate success for all students through excellence in curriculum.

The Fort McMurray Catholic Schools
Outcome-Based Education Team

Superintendent's Message

Every Child Can Learn is a new paradigm about a belief system on how students learn. It can be *'caught'* by all teachers of student learning, with excitement. This document is a result of many joint efforts by members of the Fort McMurray Outcomes-Based Education Team. The contents have emerged as a result of three years of planning and implementing the strategies described in the document.

School improvement is a continuous process, due in large part to the changing and varying needs of our learners. I believe that **Every Child Can Learn** will be a practical resource for other teaching teams in Alberta. It will enhance collaborative opportunites and will assist the efforts of teaching teams in the redesign of classroom delivery strategies.

Children are our most important resource. This document is dedicated to the title and theme **Every Child Can Learn.** Making this happen is a professional task. This is one resource that will help all students to achieve success in their school experiences.

Jerry Heck
Superintendent of Schools

Purpose

In this document, we will:

- highlight the practical connections among results-based or outcome-based, continuous progress and integrated curriculum
- describe effective educational efforts and beliefs that accommodate differences in learning and promote learning success
- invite administrative and teaching staffs to participate in collaborative discussions and efforts that promote learning success for all students.

We have gained many new insights regarding the teaching and learning process in the last few years. What is described in this document is not a "program", but a process of beliefs and strategies that have guided teacher reflections and decisions. It is our hope that some of the strategies presented here may serve to introduce some practical instructional ideas for teachers. If a few of the ideas described in this document enhance collaborative teacher thought and action, and promote the success of even one learner, our task will have been successful.

In the eyes of teachers, the classroom can be seen as a group of musicians, masterfully guided by a conductor who manages all the aspects of each individual or group performance. During large group time, all the "players" work together to create a wonderful masterpiece performance for their own enjoyment of learning or, often, for another appropriate audience. During individual or small group learning time, each player continues to practise diligently in order to improve his or her own quality of performance. Some players may take more time to practise than others in order to reach the desired sound quality. Each player makes a unique contribution to the whole group. There is a rich variety of sounds. The contributions of the various players in the group enhance the performance and the performance matches the criteria the conductor and players have established as being a quality or high standard performance. If, at some point, a performance is judged to be inadequate, the entire group, facilitated by the conductor, determines how best to improve the quality of performance.

At the same time, in the eyes of teachers, the classroom can be seen as a combination of many masterpieces, each learner being one of them in his or her entirety; each one learning to play and learn at his or her own pace; and each one respected and acknowledged for the learning or performance he or she demonstrates.

Opportunities for Reflection

Developing connections
that make learning meaningful for each student
is the important task for teachers, administrators and parents.
We encourage you to
work together to make the connections
that will be most meaningful for your learners.

Reflection and collegiality are the two main reasons adults make changes or improvements (Costa and Garmston, 1989). For this reason, we believe it is important to use a format that encourages teacher thought and discussion. Another reason for using this format is the belief that each district and school has a unique character, given the strengths and needs of the students, staff and community. Therefore, each district and staff deserve to develop their own unique strategies in accommodating the diversity of learner needs.

We hope our insights and "stories" will provide some ideas for reflection. Take what you believe to be the best ideas and integrate them with your own insights. Then implement the processes carefully — full of care — with and for your students!

This symbol denotes the "Reflection Section" within each chapter and provides an opportunity for staff teams to reflect on and discuss the questions and topics. The leaf symbolizes new growth, which can occur in education when collaborative teacher reflection, discussion and action take place. Seen from another perspective, the leaf may resemble the shape of a heart, which also characterizes the significance of collaboration, for it is the action of sharing ideas and strengths that can promote success in educational improvement.

Sources to Consider

The sources identified are a few of the works that may motivate reading and discussion of the topics identified. You may wish to suggest other sources for your colleagues who are participating in the collaborative planning process.

Additional • provides an opportunity for you to identify further sources.

Definitions of Terms as Used in This Document

Child, student and learner are words used to describe the person for whom the educational experiences in schooling are developed. The learner will be referred to, generally, as the child or student who has demonstrated the responsibility and desire to be actively involved in his or her own learning process. This implies the understanding that the instructional process is one that is designed to promote the active involvement of learners.

Essential learner knowledge, skills and attitudes or intended learning outcomes are the statements of significant priority learning that defines the purposes and expectations for student learning. Focus on these broad-based learning outcomes provides meaning for what may be considered the detailed parts of the curriculum.

Outcomes are actual demonstrations of student learning. These demonstrations of learning are linked to the significant priority learning we want students to demonstrate during their school years and by the time they leave our schools.

Results-based or outcome-based means that all the components of schooling, including instructional practices, professional development, assessments of and credentials for student learning, are continuously focused on the essential knowledge, skills and attitudes that students are expected to demonstrate by the time they leave the school or district.

Continuous progress is the process within which student learning growth is planned, fostered and communicated. Planning for learning opportunities is based on knowledge of what a child can do, and what he or she should be learning next along the continuum.

Curriculum is the statement of intended student learning, also generally referred to as goals or objectives. The curriculum provides the details that assist in planning for a learner's demonstration of the essential outcomes.

A learner focus implies that the instructional methods chosen for the teaching and learning process are those that best match learner strengths and needs, and child development principles.

A clear focus on outcomes and learner strengths is the clearly planned and delivered communication of what is to be learned and how it can be learned successfully by each child. A clear focus will usually indicate that instructional time is used efficiently and effectively, based on each student's meaningful mastery of previous learning.

Time and appropriate support for learning are those strategies that allow children to learn the essential concepts or knowledge, skills and attitudes in the time and way most appropriate for their learning.

Reteaching means something more than teaching the same material in the same way it was first presented. It implies that a concept is retaught using a different method to motivate learning that may not have occurred in the initial instruction. This may include cooperative learning, peer tutoring, and the use of different materials or examples that may be more suited to a child's learning style. Ideally, a wide variety of methods that allow students to be actively involved in the learning process should be built into the initial instruction, to provide the best opportunity to learn well when the concept is first presented.

Distributed practice is the regular review of previous learning so students can better retain learned knowledge, skills or attitudes.

High expectations are expectations and beliefs held by teachers and students that all students can reach the high standards set for them within each level. High expectations must be accompanied by appropriate time and support for learning.

Mastery is the successful demonstration of student learning at a high level of performance. Most students are able to master a new concept in generally the same time, but the way in which they learn must be addressed to encourage learning. A child's belief in his or her own ability to demonstrate success at a high level needs to be fostered, beginning in the early years of schooling. It is also important to address "what" needs to be demonstrated at a high level. All demonstrations of student learning should be focused on the essential learning.

Assessments are the methods used to collect information regarding student performance and growth in learning as related to the defined essential knowledge, skills and attitudes. Assessments may include portfolios, interviews, audiotapes or videotapes, photographs, surveys, paper and pencil or performance tests, parent comments, criteria checklists, student self-assessments and reflections, teacher comments, observations or anecdotal notes, and other methods.

Measuring is the comparing of student learning with clear criteria.

Indicators are summary statements collected to indicate the quality of learning or the demonstrated outcomes. Quality can be described and communicated in a variety of ways but should be aligned to the defined essential knowledge, skills and attitudes. A comprehensive set of indicators will consist of both qualitative and quantitative data about student learning.

Alignment is the congruence between the essential learning, the teaching process, the learning environment, the demonstrations of learning, and the reporting of learning results.

Integrative instruction connects student experiences with the concepts to be learned. Thematic units may provide meaning and learning. Themes should be broad based so a variety of concepts can be integrated with the broad-based concept.

CHAPTER 1

Developing the Vision: Clarifying Our Beliefs about Teaching and Learning

Developing the Vision:
Clarifying Our Beliefs about Teaching and Learning

All students can learn and experience success.

Students learn best if they are actively involved in the learning process.

All children have unique learning strengths.
These strengths must be addressed in the teaching process.

All children must experience success — this helps them feel better
and helps motivate the student.

It is important to find the child's strengths and learning style to accommodate his or her individual learning. It is also important to vary style, to give children choices.

The general feeling tone in my classroom, and my relationships
with my students is of primary importance.

(Teacher Quotes)

Sources to Consider

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What Do We Believe about Student Learning and Success?

Every child can learn! This is a powerful belief statement, which provides the beginning for a vast number of discussions regarding the teaching and learning process. What do we believe about each child's ability to learn?

Teachers' beliefs guide their actions in the classroom. Students respond to the beliefs teachers inherently communicate about their learning.

What do teachers' actions "tell" students? When teachers provide a learning environment that is rich with opportunities to explore, create, design and solve problems related to real life, the message the child receives is that exploring, creating, designing and problem solving are important! Another message received is that all children can be active and successful participants in this exciting venture of learning!

Students respond to the beliefs teachers inherently communicate about their learning.

When teachers believe that every child can learn, they begin to ask questions, such as:

- What knowledge, skills and attitudes are essential, and how should all students demonstrate successful learning in these areas?
- How does each child learn best and how am I accommodating those strengths?
- What could each child be learning next, based on what he or she already knows and can do?

Effective teachers can relate "success stories" that result from focusing on what was essential to learn, addressing the strengths of the child, and motivating learning because it connected with something the child already could do or valued.

A periodic review by teachers of what they believe about teaching and learning helps to maintain their focus while participating in the dynamic environment of learning. This review may occur reflectively for each teacher and formally or informally in team settings.

The importance of collaboration cannot be overestimated. Staffs working as a team, in cooperation with parents and community members, can develop powerful visions that promote student success.

When teachers work collaboratively to develop a vision for student success, they deliberately plan for and establish the environments that motivate learning.

The visioning process helps a district or staff to clearly identify and focus on what is essential for student learning. It also allows them to "design down" from where they want to end up! In effective schooling, this is referred to as backward mapping.

The collaborative process is a powerful way of sharing and refining thoughts, beliefs and instructional processes. It is advisable to conduct such reflections or discussions in combination with a review of

the most recent literature on good teaching and effective schooling. During reflections, teachers need to assess deliberately whether they believe that all students can learn what is essential. They also need to take a look at how their beliefs are, or can be, implemented in the schools and classrooms.

How Do We Communicate What We Believe?

As the school team's vision and belief statement is established as a result of reflections and discussions, staffs begin to find it meaningful to communicate their beliefs in the form of a mission or belief statement. Slogans, posters, brochures, newsletters or daily conversations with others can communicate our beliefs about teaching and learning or the message of **"what we are all about".**

When teachers believe that every child can learn, they communicate this belief through the teaching and learning processes in their classrooms. Deliberate planning will occur to motivate each child's mastery of the essential skills. This planning process is the result of teachers' beliefs that skills learned at high levels of application and performance provide the foundation for learning at the next level. Ultimately, if a team's focus remains on the vision, or what they have defined as essential learning, students will be better able to respond meaningfully to the teaching process. Beliefs that are not clearly defined, or are unrelated to the belief that all students can learn, promote learning results that are not necessarily a true picture of the learner's capability.

A Review of General Educational Beliefs

Educators, in the past one hundred years, generally subscribed to the philosophy that when teachers introduced a concept, most of the students would learn some of it (at least 50% of the material!), some would not grasp it, and a few would learn it very well. The result of this belief was the "bell curve" or the "normal" curve in which learning results were described as a large number of students "in the middle" and a few students at each end of the learning spectrum.

The results can be viewed in another way — a child picks up a handful of sand and puts it through a funnel. Unless the child somehow redirects the flow of sand, all the sand particles will fall to the ground in a heap, with most of the sand in the middle and the rest of the particles falling gently down from the centre.

The bell curve, as described by Dr. William Spady, is the result of the belief that unless anything redirects or acts upon student learning to make a shift in the results, most of the students will be "in the middle" with a good number of students at the sides.

Educators believed that the bell curve was a representative picture of students' ability to learn and that they could generally expect some students to learn the concepts well. They did not realize that the bell or "normal" curve was anything but normal! It did not take into consideration the interventions that might help more students learn the concepts. In fact, it was a picture that resulted from the expectations that all students should learn the concepts within the minimum allotted time.

What became the important ingredients to learning success were:

- the time in which a child was able to demonstrate learning, as compared with that of others, and
- the ability of the child to process the learning within the style presented by the teacher.

In the last few decades, educators have begun to change their beliefs about the bell curve and are developing processes through which all students can demonstrate success in essential learning. This belief implies that all children can and do learn continuously, and that educators can provide the environment, the learning support and time all students need to demonstrate their learning of the essential skills.

Within this belief system, students continued learning from one level to the next but they missed some of the foundational learning that was needed for the subsequent levels.

There are exceptions to every generalization. As teachers, we have obviously managed to meet the expectations described and we assuredly have had the delightful experience of interacting with the "exceptions" to the generalizations! Always, there have been those special people who "believed" in us and encouraged us along the way with their beliefs and their ways of making learning meaningful.

". . . all children can and do learn continuously, and that educators can provide the environment, the learning support and time all students need to demonstrate their learning of the essential skills."

(Teacher Quote)

Reflection: Developing the Vision: Clarifying Our Beliefs about Teaching and Learning

The beliefs we hold about teaching and learning guide our actions in the classroom, even if we do not consciously think about them on a daily basis (Costa and Garmston, 1989). In order to identify and describe what we really believe, we need to deliberately clarify our beliefs for ourselves. For example, what do I believe about students' ability to learn well? About learning rates and styles? About students learning from each other? About teachers making a difference? About learning environments? About feeling tone in the classroom? About high expectations? About teaching for meaning? You can add to the list!

I/We believe that:

What do my/our beliefs "tell" students as I/we interact with them?

In which ways do I/we communicate my/our beliefs about learning and teaching to students, parents, teaching colleagues, the community?

Following your completion of all the reflection opportunities in this document, you might wish to return to this section and include some more of your insights.

CHAPTER 2

What Constitutes Learning Success for Each Child?

What Constitutes Learning Success for Each Child?

Sources to Consider

- Alberta Education (1991). *The Emerging Student: Relationships Among the Cognitive, Social and Physical Domains of Development.*
- Alberta Education (1987). *Essential Concepts, Skills and Attitudes for Grade 12.*
- Alberta Education (1990). *Program Continuity: Elementary Education in Action.*
- Alberta Education (1990). *Program of Studies: Elementary Schools.*
- Alberta Education (1988). *Students' Interactions Developmental Framework: The Social Sphere.*
- Alberta Education (1988). *Students' Physical Growth: Developmental Framework Physical Dimension.*
- Alberta Education (1987). *Students' Thinking: Developmental Framework Cognitive Domain.*
- Alberta Education. Teacher Resource Manuals.
-
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Since learners are to demonstrate success from one level to the next, there must be a continuum or continua along which they need to progress. And if there is a continuum, how can teachers describe the progress of each learner? What should each child be learning next, knowing that they are continuously learning and that teachers can motivate their next steps?

In education, it is assumed that someone who is responsible for a child's formal schooling, namely the teacher, must have a good picture in mind regarding the journey or the learning process. The journey itself may be a combination of unexpected stopovers, explorations of new areas and new experiences for each learner. During the journey, the teacher focuses on what is essential and addresses learner strengths and interests in order to make learning meaningful.

When the teacher is able to describe clearly where each child is within the learning continuum, and where he or she is going, there can be focused planning and careful selection of the best ways to meet the child's needs and interests. There can also be more focused celebrations of learning.

A clear description of "what is important" for students to know and do in a variety of learning areas must guide the daily decisions in teaching.

Partners in the learning process — parents, teachers, administrators, students and community members — need to work together to develop a clear description of what is essential for students to demonstrate successfully.

All curriculum details must become a part of the bigger picture that describes essential learning. Otherwise we can become overwhelmed with the details of the curriculum and lose sight of what is important and what provides meaning for learners. The guiding questions must be:

Partners in the learning process, parents, teachers, administrators, students and community members need to work together to develop a clear description of what is essential for students to demonstrate successfully.

- What do parents, teachers, administrators, students and community members believe students should be learning? What is this broad-based essential learning?
- How effective are we now in having our students demonstrate essential learning successfully?
- What could we be doing to bring about the desired learning demonstrations or results?

Staff need to determine how essential learning will be defined, which processes best promote the learning desired, and which methods will be used to assess a learner's growth. All definitions must be aligned with the essential knowledge, skills and attitudes students are expected to demonstrate by the time they leave our schools.

The process of collaboratively defining what is essential in schools is of paramount importance. The process promotes ownership of what is important in schools and how staffs and communities, as partners, can contribute meaningfully to the success of all students.

One teacher,

after many years

of teaching, said

"I have never before

felt so focused!"

(Teacher Quote)

Reflection: What Constitutes Learning Success for Each Child?

Consider the journey of your learners. What is the broad-based essential learning you believe children should demonstrate in your school and classroom? What journey are they on? Write your vision in terms of student demonstrations (I/We want my/our students to be problem solvers, decision makers, positive and collaborative contributors, effective communicators, etc.).

What types of experiences do children need in order to be able to demonstrate their ability appropriately in these areas?

Share your vision with a colleague. Discuss the similarities and/or differences of your visions. If you are working as a team, develop a list of approximately five to ten statements that are common in the group. What are they?

Is your vision aligned with the Goals of Education and the Goals of Schooling in the *Program of Studies: Elementary Schools?* Describe the similarities of your statements with these policy statements.

Does your vision describe the learning performances you promote in your classroom or school? List some of your current classroom or school practices that support your focus.

Reflection: What Constitutes Learning Success for Each Child? (continued)

Students know, inherently, that our actions are a result of our beliefs. Now that my/our beliefs are in focus, do my/our actions let the students know that their input into a visioning process is also important? Students are full participants in the learning process. What methods will I/we use to involve my/our learners in developing a vision for their learning?

_____

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_____

Questions to consider after student input.

What knowledge, skills and attitudes do the students identify as being important to them?

_____

_____

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What are the processes that students believe will help them learn the knowledge, skills and attitudes?

_____

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What will student success in these areas look like? What criteria or expected demonstrations of learning have been identified for each essential learning?

_____

_____

_____

_____

_____

_____

Now that I/we have

- articulated my/our beliefs about the learning/teaching process,
- identified and defined essential learning, or knowledge, skills and attitudes that will provide focus and meaning for instruction and assessments,
- checked to see that the vision is basically aligned with the sources identified, and
- developed plans for involving learners in the visioning process,

I/we can better focus on and plan for the individual success of my/our learners.

> *"Students are normally able to learn more than they do."*
>
> (Teacher Quote)

NOTES:

CHAPTER 3

Contexts for Learning

Contexts for Learning

"The welcoming classroom is one in which a child, when entering, can feel and say, 'This is for me!'"
(D. Sobolewski, Teacher)

Sources to Consider

- Cochrane, O., Cochrane, D., Scalena, S. and Buchanan, E. (1984). *Reading, Writing and Caring.* Manitoba.
- Jacobs, H. H. (1989). *Interdisciplinary Curriculum: Design and Implementation.* ASCD. Virginia.
- Schwartz, S. and Pollishuke, M. (1990). *Creating the Child-Centred Classroom.* Irwin Publishing. Ontario.
- Shoemaker, B. J. E. (1989). *Integrative Education: A Curriculum for the Twenty-First Century.* Oregon School Study Council. Oregon.
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A welcoming classroom is one of the first introductions a child has to the formal learning process. From this environment, the child makes decisions about whether schooling will be worthwhile. If the child is greeted with colourful displays, learning centres, concrete materials and naturally simulated spaces for learning (e.g., reading areas), he or she may well feel invited into the learning context.

The contexts for learning in formal schooling are the combined physical resources, processes and human interactions that characterize a classroom or school. Learning, however, has already taken place prior to a child's entry into the school and will continue to take place in the various environments within each child's life.

Before the child arrives at school, he or she has already developed skills of communication, problem solving and decision making, as well as specific styles of learning that will enable his or her learning at school. These skills and styles contribute significantly to a child's continued learning process. Schools and teachers must attempt to accommodate these strengths in order to encourage each child to value his or her continued learning. This valuing process can be promoted by connecting the school processes with what the child can already do, and moving the child to the next steps of learning in which the skills can become better developed. With appropriate guidance and participation in safe and positive learning environments, children can continue to learn ways of fulfilling their needs to communicate, solve problems, develop friendships and contribute meaningfully to their society.

Our focus as educators should be on expanding the quality and variety of ways in which students are introduced to and interact with content.

The school and classroom environments that consistently "welcome learners" are those that:

- communicate a clear purpose or mission
- maintain a clear focus on what is important for students to learn, and align all curriculum details with these essential outcomes
- build next-step learning on previously demonstrated learning
- provide a positive climate for learning. This implies a context that is rich in opportunities for children to be actively involved in the learning process
- maintain high expectations for each child's successful demonstration of learning
- positively promote the child's belief that he or she can learn well
- relate learning to real-life situations through broad-based themes, the use of manipulatives, story or metaphor, or through a child's own experiences and previous learning
- use physical space to emulate the dynamic versus static characteristics of learning; e.g., learning centres, rug areas, arrangements to accommodate small group, large group and individual learning, resource and materials areas accessible to students to promote choices and decision making based on interest
- provide a significant amount of time for whole class activities that focus on essential learning
- employ strategies that promote active participation in the learning process; e.g., cooperative learning, discussions, learner inquiry, problem solving and creativity. This implies that learning experiences are of high quality for all students and promote meaningful interaction with the details of the curriculum
- provide appropriate support and time for each child's learning
- monitor student progress frequently and provide appropriate feedback regarding learning
- incorporate the use of open-ended questioning where predetermined "right" answers are not necessarily available but where students can apply principles to new situations
- engage student interests or "passions" for learning; i.e., topical interests
- use the skill of summary; i.e., what we learned today
- model collaborative decision making in order to promote learning success for all students
- observe, credit and celebrate the continuous learning of students.

One of the exciting features in establishing effective learning environments is the process of reflective and active collaboration. Teachers can share their ideas on what is working or how changes can be made to improve the learning environment.

The processes of creativity, problem solving, discussion and inquiry are as essential to teachers as they are to the learners! Teacher demonstration of collaboration and creativity is a vital component of the learning environment for students. Students learn vicariously through their observations of teachers!

The processes of creativity, problem solving, discussion and inquiry are as essential to teachers as they are to the learners!

Reflection: Contexts for Learning

What are the welcoming physical features that invite learning in my/our classroom/s?

What are the processes I/we use to provide meaning for my/our students (e.g., use of themes, introduction of new content through story, metaphor, or use of manipulatives)?

Which instructional methods allow children to interact with each other?

What information about a child's previous learning allows me/us to build on that learning?

NOTES:

CHAPTER 4

Identifying Learner Strengths in Planning Next Steps

Identifying Learner Strengths in Planning Next Steps

"All students are individuals and have different learning strengths."
(Teacher Quote)

Sources to Consider

- Alberta Education (1985). *Learning Styles.*
- Alberta Education (1990). *Program of Studies: Elementary Schools.*
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- American Association of School Administrators (1991). *Learning Styles: Putting Research and Common Sense into Practice.* Virginia.
- The Board of Education for the City of Toronto (1980). *Observing Children Through Their Formative Years.* Ontario.
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- Gregorc, Anthony (1985). *Inside Styles.* Gabriel Systems, Inc. Massachusetts.
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All children can learn, but not necessarily in the same way or at the same time.

In order to focus on what each child can do and what he or she needs to learn next, the development of a clear profile of each learner's strengths and previous learning is imperative. This profile, based on observation and documentation of a child's development, can provide a picture of each child's learning growth.

All children can learn, but not necessarily in the same way or at the same time.

Teachers generally have information available regarding each learner. Have the learner's needs, strengths and interests been identified? How does the child learn best? Does he or she prefer visual, tactile or kinesthetic learning processes? There are many other ways to describe a child's preferred learning modes. For example, where does a student learn best? In a small group? Individually? What environmental factors most influence each child's learning (e.g., temperature and lighting)? Numerous surveys or checklists of learner development are

available to begin collecting this information. Many teachers are carefully observing children with reference to the Piagetian stages of development. All of these methods of observing and collecting information about learner growth can add significant information about a child's learning strengths and needs. Generally, if instructional methods provide a wide variety of learning options for students, a teacher becomes very astute in accommodating learner strengths and needs. Variations in learning, within the context of responsibility and respect, may be accommodated by some of the following activities or centres. Teachers may wish to add ideas for what works best with their students.

Group/Interaction Preferences (Large Group, Small Group, Individualized):
- reading with a partner
- small group discussions
- individual or team problem-solving processes
- project team partnerships
- cooperative learning
- daily tasks shared by students
- sharing times; e.g., to give thank you notes for classmates who performed a "good deed", show and tell
- teacher or adult interaction
- use of praise.

Learning Preferences (Visual, Tactual, Kinesthetic, Auditory):
- viewing a video or listening to a tape
- listening centres
- concrete materials/manipulatives centres
- movement and play areas
- teacher talk.

Sound Preferences (High/Low):
- learning accompanied by music
- independent work areas
- quiet but comfortable space for reading.

Structural Preferences (Formal/Informal):
- designated rows
- reading centres, writing/publishing clubs
- class library with volunteer student librarian
- provision of choices; i.e., to work on the floor or at a desk
- clear and explicit directions.

Lighting Preferences:
- diffused lighting
- direct lighting areas.

Temperature Preferences:
- working near windows for cooler temperatures
- wearing extra layers of clothing.

Time Preferences:
- varying time to learn and length of tasks
- consideration of preferred time to learn; i.e., morning or afternoon.

Intake Preferences:
- options for snack breaks.

An important consideration when promoting the use of learning centres is the understanding that ALL students should have access, if they choose, to work at the centres. Centres should not be available only to the students who have "finished with their work". It is possible that the activities available at the centre are just what some students need to "connect" with the learning!

It is also important to remember that students can be "stretched" into enjoying a variety of learning styles by their involvement in different activities. However, teachers need to observe student choices carefully before making recommendations for some students to participate in a learning activity in a particular way. Again, some of these strengths may be addressed by providing variety in the teaching process when a concept is introduced.

The concepts identified in the curriculum provide the details or the framework for the essential skills. In order to make learning meaningful for each child, the teacher should have a clear picture of what each child already knows about a specific concept. What evidence does the child provide to indicate that he or she has mastered the previous learning for the next step? Does the child need more or less time to learn the concept currently being taught? If the child already knows the material, what should he or she be learning next? How will that learning be encouraged and accommodated?

A clear picture of what a child knows and can do helps teachers to plan learning activities that will accommodate the child's next learning steps.

The collection of student "learning evidence" related to curriculum should occur on a regular basis. Methods to collect this performance data may include a variety of measures as described in the assessment section.

Keeping a clear and ongoing record of what each learner can do is essential in determining what he or she can learn next. Each teacher must have a record that clearly outlines each learner's progress within the learning continua. This record keeping system provides an ongoing profile of each student. Generally, teachers maintain this record apart from the student portfolio, which is a collection of student demonstrations of learning. In this way, they have a listing of the criteria for learning and a composite picture of how each child is doing in relation to the criteria. Frequently, this record also gives them a view of where they need to spend more instructional time with a group of students or where they need to vary instruction for some learners.

Within the learning process, students may require the assistance of community resource persons. Administrators, teachers, parents, resource persons and the student need

to work together to match learning experiences appropriate for current and next-step learning.

"I have been in the class weekly, and I have seen them . . . working at their level, concentrating on their own tasks without comparing their progress to others. It makes for a very healthy attitude towards learning."

(Parent Quote)

"If a child comes away from school without having his or her basic learning needs addressed, then schooling has failed the child."

(Dave Sobolewski, Teacher)

Reflection: Identifying Learner Strengths in Planning Next Steps

What procedures or measures am I/ are we using to develop a clear picture of each learner's learning style preference?

What evidence of learning has been or should be included in the learner's profile to describe what he/she can do in the essential learning areas (math/science, physical development, social skills, communication skills, emotional development, creativity, critical thinking, etc.)?

How well does/should the learning match the criteria for performance in order to be considered successfully demonstrated?

What physical resources do I/we need to enhance the collection of information for each student? Why are these needed? How will they be acquired/ developed and used, if feasible?

Are there community resource persons who could provide services matched with a child's learning needs? If so, how would these services provide assistance for the child's progress in learning the next steps?

What processes could be considered to allow teachers, administrators, parents, students and the resource person/s to work collaboratively in promoting a learner's success?

NOTES:

CHAPTER 5

Instructional Practices That Promote Continuous Learning

Instructional Practices That Promote Continuous Learning

Teaching teams should keep those practices which are working now.
If different results are expected,
some practices may need to change!
Educational partners should work collaboratively
to determine what changes might work in their schools.

Collaborative Planning for Continuous Learning

Sources to Consider

- Good, Thomas L. (1987). Two Decades of Research on Teacher Expectations: Findings and Future Directions. *Journal of Teacher Education 37.* pp. 32–47.
- Green, Robert L. (1991). Expectations: A Driving Force in Human Behaviour. *The Effective School Report.* Vol. 9, No. 9. New York.
- Guskey, Thomas R. (1988). Mastery Learning and Mastery Teaching: How They Complement Each Other. *Principal.* pp. 6–8.
- Lezotte, Lawrence W. (1991). *Correlates of Effective Schools: The First and Second Generation.* Effective Schools Products. Michigan.
- Northwest Regional Educational Laboratory (1990). *Effective Schooling Practices: A Research Synthesis 1990 Update.* Oregon.
- Smith, Stuart C. and Scott, James J. (1989). *The Collaborative School: A Work Environment for Effective Instruction.* ERIC Clearinghouse on Educational Management. University of Oregon. Oregon.

> *"It is good to get together with*
>
> *others to share ideas.*
>
> *We learn from one another."*
>
> (Teacher Quote)

The collaborative process of vision setting and problem solving at the school-based level is probably the single, most powerful ingredient in the successful implementation of continuous learning! Problems are solved and the teaching process is analyzed within a supportive environment. The desire for continuous, collaborative improvement efforts are modelled for students! This demonstration of teamwork opens the way to critical thinking and creative teaching.

A variety of instructional practices and conditions have been researched and found to promote learner success effectively. These include instruction guided by a preplanned curriculum, cooperative learning, mastery learning, questioning,

feedback and reinforcement, efficient classroom routines, clear and focused instruction, reteaching and review, high expectations for student learning, appropriate time to learn provisions, pleasant learning environment, professional development, continuous improvement toward instructional effectiveness, and the list goes on.

Several instructional practices have been found to be more effective when implemented in combination with each other. Four effective practices that promote successful learner performance are presented here. These practices are particularly effective when used in conjunction with the beliefs that each student is capable, that success at one level is likely to promote success at the next level and that teachers can provide the environment that promotes each learner's success.

The four practices are:

- clarity of instruction with a focus on what is essential to learn
- appropriate support and time for learning
- high expectations for each learner's success
- frequent feedback to learners regarding learning progress.

Teachers, not always having the time to catch up on all the reading, appreciate team planning opportunities in which researched instructional methods can be discussed. This opportunity to reflect and be a participant within an atmosphere of collegiality often motivates the most exciting and innovative teaching processes.

Teachers enjoy the opportunity to share their creative ideas and learn from others. They are also lifelong learners!

Collaborative planning should be a voluntary and natural response to the desire to be continuously learning and improving! There are physical considerations however, because meeting "on the run" can be frustrating for teachers. Time should be set aside for reflection and collegial planning. Training for collaboration might include demonstrations in effective communications, peer observation skills, questioning strategies, how to provide feedback, conflict resolution and team problem solving. These are skills that might also be helpful for teachers in their daily interactions.

Scheduling considerations may include providing a block of time so that teachers are able to collaboratively:

- determine the prerequisites students need to learn the concepts
- integrate broad-based themes
- determine methods of assessments
- develop questions and activities that integrate higher level thinking
- design activities that accommodate a variety of learning styles
- "share" students or implement cross-level tutoring strategies. For example, Level Six students may move to a Level One location and assist students in the learning of math concepts. Often, the tutors learn as much from the process as the students being taught! According to the old adage, "when you teach, you learn twice"!

Whatever best instructional and school delivery processes are chosen, the collaborative focus must remain on essential learning, and on encouraging and documenting each learner's growth within the defined continua.

Through a collaborative team effort, staffs will need to discuss "how" continuous learning for students will be addressed in the school. One staff may agree to maintain a whole group classroom setting and make variations in the teaching process to match learner strengths. Other staffs may wish to brainstorm for alternatives in scheduling. All teachers, parents and students need to understand how continuous learning will "look" in the school, what process is available for students to learn continuously, what method of reporting will be consistent with continuous learning, and what instructional methods will best accommodate the continuous learning of each child. These processes may be continuously improved based on collaborative reflection and assessment of how well the processes are working.

. . . the collaborative focus must remain on essential learning and on encouraging and documenting each learner's growth within the defined continua.

As a child moves from one teacher to the next, documentation of learning successes should accompany or follow him or her. This documentation provides a clear picture of the successes each child has demonstrated. Each teacher can then continue the learning process, based on current knowledge and the description of each child's learning within the essential outcomes.

Reflection: Collaborative Planning for Continuous Learning

What efforts have been made to promote collaborative planning for continuous learning processes in our school?

What methods of instruction and delivery that promote continuous learning are working well in our school?

What other methods should we consider to more effectively provide a continuous learning opportunity for my/our students?

NOTES:

Clarity of Instruction with a Focus on Essential Learning

> *"I truly believe that the more the students understand the objective (how, why, etc.) they will achieve the outcomes. Clearly explained outcomes help to save time and promote success."*
> (Art Zasadny, Principal)

Sources to Consider

- Hunter, Madeline (1982). *Mastery Teaching*. TIP Publications. Los Angeles.
- Northwest Regional Educational Laboratory (1990). *Effective Schooling Practices: A Research Synthesis 1990 Update*. Oregon.
- Spady, William and Marshall, Kit (1991). Beyond Traditional Outcome-Based Education. *Educational Leadership*. Vol. 49, No. 2. VA. pp. 67–72.

> If we communicate clearly what we expect students to know and be able to do, they will be more likely to demonstrate the learning described.

If we communicate clearly what we expect students to know and be able to do, they will be more likely to demonstrate the learning described. Some of this "clear" communication occurs by the sheer example of the classroom environment itself. If the environment provides a wide variety of learning experiences for children, the message students get is that exploration and discovery are important, and that learning can take place in a variety of ways. Then, within this environment of respect for a variety of learning processes, a student can more readily integrate the teacher's verbal communications with what in fact the classroom is "all about"!

Thinking skills generally receive a high priority in the listing of essential learning. Teachers are encouraged to integrate thinking across the curriculum.

In order to encourage student demonstration of thinking, the process skills can be deliberately taught and integrated with current learning.

In teaching process skills, such as cooperative learning, teachers are sometimes advised by workshop leaders to teach the process without curriculum content, possibly in the first week of September. This allows students to get to know one another within an interactive environment.

Group skills, such as listening, paraphrasing and conflict resolution, can be taught to assist students in their daily interactions with others.

Other thinking skills and problem-solving processes can also be integrated with current learning in a similiar way. Edward deBono's PMI, or Plus, Minus and Interesting strategy, for example, is a helpful tool in assisting student decision making. Techniques of comparing and contrasting, based on student interests, provide the tools for analysis of curriculum content. The creative thinking processes; e.g., fluency, flexibility, originality and elaboration, can be taught.

These higher level thinking strategies can be learned and applied without the tedious "drill and practice" which sometimes accompanies the teaching of knowledge. When students master these high level thinking skills, they begin to see value in learning the knowledge. They also begin to believe that their thinking is valued in the learning process.

There are numerous ways to motivate learning and provide clarity for a learner. Sometimes, however, students remain unclear about *what* is expected when a task is assigned. This may be due to an unclear explanation about what is to be learned, and *how* it can be learned or demonstrated successfully.

The connections between the task at hand and previous learning are not always clearly linked. Teachers should carefully connect meaningful instruction with what they want students to demonstrate. For example, if teachers want students to demonstrate their ability to solve math problems, instruction should provide clear and meaningful examples to promote learning. Active participation through the use of manipulatives provides the necessary link most young learners need to understand the concept.

Teachers' beliefs about clarity can have peculiar and subtle effects on the learning process. Actually, these effects are not as subtle as we may have first thought. At times, teachers may believe that when they have clearly presented a concept to students, it has been learned! This may be referred to as "covering" the material or curriculum, but it does not necessarily imply that students have learned it. Learning must be observed and documented when it is demonstrated by students, not when content has been "covered".

Clear verbal instruction is a vital part of the teaching process, but clarity also means responding to a variety of instructional styles in order to motivate and promote student understanding. It may mean reteaching the concept in another way at another time so that more students have their learning styles appropriately addressed. For example, if a lecture format and visuals are used in the initial instruction, a teacher may need to employ the use of verbal interaction, open-ended questioning or cooperative learning on another day to give students another opportunity to demonstrate their learning. Again, there is no one way to promote understanding for all students. The strategies chosen by the teachers must be a response to the unique strengths of the learners in the classroom.

Reflection: Clarity of Instruction with a Focus on Essential Learning

How do I/we ensure that the essential learning goals and concepts are clearly communicated to learners, non-verbally and verbally?

What evidence will I/we accept from learners that they have successfully demonstrated the essential concepts?

Which methods or learning processes, in addition to the study of content, should I/we teach our students in order to promote essential learning (e.g., study skills, problem-solving processes, collaborative efforts . . .)?

Which instructional methods could I/we use in the next lesson to provide greater meaning and clarity for some learners?

"It helps me learn faster."

"I like it very much because I know how to do it."

(Grade 6 Student Quotes)

NOTES:

Appropriate Support and Time for Learning

> *"The focus was on mastery of problem-solving methods and processes rather than speed."*
> (Teacher Quote)

Sources to Consider

- Alberta Education (1988). *Education Program Continuity: A Policy Statement on the Articulation of Children's Learning Experiences, Early Childhood Services Through Grade Six.*
- Alberta Education (1985). *Learning Styles.*
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- Bloom, Benjamin S. (1984). The Search for Methods of Group Instruction as Effective as One-to-One Tutoring. *Educational Leadership.* May. VA.
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> *Recently, a teacher was asked to explain the radiant look on her face. Without hesitation, she began to explain that her teaching vigour was a result of her renewed belief that all students can learn. She said, "When students do not demonstrate success immediately, it is not failure, they just haven't demonstrated it yet!"*
> (Teacher Quote)

Appropriate support and time for learning can effectively promote successful demonstrations of student learning.

The collaborative efforts of teachers to address different learner strengths, and to develop ways of addressing the different "time to learn" needs, are critical in the continuous learning process. The fact that one learner may need more time to learn than others means that the child should be given the opportunity to learn at his or her own learning pace without being penalized for the amount of time it took to learn. In the same way, a child who needs less time to learn should be given the opportunity to learn at his or her own pace, also without being required to maintain the same learning methods or time that other students might need.

How to address these issues of support and time is a major concern for teachers when they begin to review the possibilities. The scope of these needs requires that teachers and administrators work together to design a delivery and reporting system that addresses these important issues. Parent partnerships in the

planning process are highly recommended to ensure awareness and support for the process.

Support for learning implies that the *ways* in which children need to learn in order to be successful are addressed by teachers. This could include the use of a wide variety of instructional strategies, such as peer tutoring, learning centres, visuals, problem solving, discussion opportunities, and manipulatives.

The purpose is to motivate student learning during the introduction of a new concept. If students do not demonstrate understanding at the first opportunity, reteaching in a different style is necessary. This might mean that peers tutor peers, or that cooperative learning or another opportunity not presented in the first lesson is offered to assist learning. If a learner demonstrates understanding during the first opportunities, enrichment opportunities should be available. For example, a child could be given the choice to work or play at a learning centre, study a topic of interest and develop a mentorship or special project related to the topic, or continue learning the next concept in the learning continuum. Options should be made available to the child so that personal motivation and active involvement in the continuous learning process can be maintained.

Support for learning may also include the use of distributed practice, or appropriate review, so that children can better retain their previous learning. Students must be given more than one chance to learn. In this way, **time** becomes a resource rather than a determiner of when something "can" and "must" be learned. Reporting methods should accommodate this continuous learning process. For example, when a concept is introduced in October, is it seen as the only time in which a child can receive acknowledgement for having learned that concept? If, through reteaching and using a variety of instructional processes such as visuals, manipulatives or movement, the child shows a successful demonstration of learning in January, will he or she receive acknowledgement for having learned it? Or is the previous "unsuccessful learning" averaged into the current successes?

Learning is a process that can be continuously described and celebrated! A child's learning must be fully acknowledged, regardless of the time it took to learn.

> *". . . Gives us a chance to learn and figure out what our problems are."*
> (Gr. 4 Student Quote)
>
> *"I have noticed an increase in student confidence!"*
> (Teacher Quote)

Reflection: Appropriate Support and Time for Learning

> *"(This process) reinforced to my child that the ability is there, therefore making her more confident."*
> (Parent Quote)

What support do I/we provide a student when a concept is not understood the first time? Do I/we vary instruction to include a different teaching strategy? Do peers tutor peers? What specific methods have I/we used in the reteaching process?

What provisions have I/we made to provide the learning time required for each child and to "credit" or celebrate learning as it occurs within the essential knowledge, skills and attitudes continua?

What processes could I/we consider to improve my/our provision of support and time for student success?

How do I/we provide meaningful distributed practice opportunities for students to retain their previous learning?

What current choices for meaningful enrichment are available to a learner who has demonstrated understanding of a concept? What options could I/we consider that might assist learners in progressing at a rate consistent with their learning strengths?

NOTES:

High Expectations for Student Success

> *"It feels good to succeed and it translates into every part of their life, social and academic. Kids who feel good about themselves will succeed."*
> (Quote by Sue Russell, Elaine Ramchander, Alice Lord — Parents)

Sources to Consider

- Good, Thomas L. (1987). Two Decades of Research on Teacher Expectations: Findings and Future Directions. *Journal of Teacher Education 37.* pp. 32–47.
- Green, Robert L. (1991). Expectations: A Driving Force in Human Behaviour. *The Effective School Report.* Vol. 9, No. 9. New York.
- Northwest Regional Educational Laboratory (1990). *Effective Schooling Practices: A Research Synthesis 1990 Update.* Oregon.

Effective schools and teachers are consistently characterized by their high expectations for all students to learn well. No students are expected to fall below the level of learning required to be successful at the next level. These teachers use their knowledge of results as the basis for establishing the next learning steps.

High expectations should not be confused with high standards. Standards are goals for which teachers and students reach, but high expectations are "beliefs in action". Teachers have expectations first of all that they can provide the appropriate contexts and support processes that will help students to learn. Then they maintain expectations for the successful learning of all students. As a result, students begin to exhibit high expectations and confidence in their own learning.

Some ideas regarding high expectations include the following (Spady, 1989):

- Students will probably live up to teachers' expectations of them.
- Student work accepted, when it is below "standard", is perceived to be expected. The message received is potentially "that's what the teacher expects from me because that's what was accepted".
- Student work that is "doubtful" can be handed back without a grade and with appropriate feedback so a student can learn from "mistakes". If a "grade" is provided, students believe they are "done". Teachers need to help students understand that work that does not demonstrate the essential outcomes or learning is still "in progress".

High expectations for student success make a significant difference in the learning process. Children will generally live up to the expectations of their teachers. At the same time, high expectations for student success, without appropriate support and time to learn, are little more than high standards without the necessary assistance for students to reach them. High expectations, support and time for student success should be implemented as "partners" in the instructional process. High expectations should also be accompanied by a clearly communicated vision of what success looks like.

Criteria for success may be agreed on by a team of teachers in order to maintain consistency from level to level and from teacher to teacher. If criteria for quality work is established with students, there is a greater likelihood that students will attempt and be able to match the criteria.

A mastery learning process that employs high expectations, and appropriate support and time to learn, includes the following strategies:

- A concept is introduced through a variety of instructional methods. Ideally, learners should be actively involved in the learning process to promote meaning.
- Learning is frequently monitored as learners participate in the process or complete learning tasks.
- When guided tasks have been completed and done well, learners "qualify" for an assessment.
- Assessments may be observations of performance, demonstrations using manipulatives, projects, paper and pencil tests or other formats determined by the teacher/student.
- Students who do not demonstrate understanding of a concept may have the concept retaught by a peer tutor, teacher aide, or through additional practice using another mode of instruction. Every effort should be made to provide an alternative learning method that is better suited to a child's learning strength. A student may learn many of the outcomes well but may require assistance in others. Grouping formations are continuously changing due to the differing levels of learning within the various outcomes. Learning in progress is not viewed as failure. It is just as it appears to be — learning in progress! At the higher levels, learners begin to demonstrate the responsibility to seek the reteaching. In this way, the responsibility for learning becomes a shared process.
- When ready, the learner may reassess on the outcomes not mastered initially. This is done through a parallel assessment — one that is not more nor less difficult than the first assessment. Credit or recognition of achievement is recorded when the learning is demonstrated.
- Students who demonstrate learning of the concepts may progress to the next step or choose to participate in enrichment activities. Some learners may choose to tutor children in another class or grade level. In this way, they foster high expectations and support for the learning of their peers.

If criteria for quality work is established with students, there is a greater likelihood that they will attempt and be able to match the criteria.

"My child has blossomed with this approach. His increasing confidence is in all areas, in his total regard of himself."
(Parent Quote)

Reflection: High Expectations for Student Success

How do I/we demonstrate the use of high expectations in my/our classroom?

NOTES:

Methods I/we might wish to explore in our efforts to maintain high expectations for student success are:

Providing Appropriate Feedback to Learners

Sources to Consider

- Hunter, Madeline (1982). *Mastery Teaching*. TIP Publications. California.
- Northwest Regional Educational Laboratory (1990). *Effective Schooling Practices: A Research Synthesis 1990 Update*. Oregon.
- Spady, William and Marshall, Kit (1991). Beyond Traditional Outcome-Based Education. *Educational Leadership*. Vol. 49, No.2. VA. pp. 67–72.

Providing appropriate and specific feedback to the learner during the learning process is a vital part of each child's learning success. If a teacher can specifically and positively communicate what was learned well, the child will be better able to repeat the performance. When a child is not clear about what he or she did to demonstrate success or what was expected, confusion can occur.

Learning often has its own rewards. However, the use of praise can motivate young learners. In providing praise, teachers must specifically identify what the child has demonstrated successfully. The use of unspecified praise may build undesired learner dependency on teachers. Rather, teachers should attempt to involve the learner in a process that allows the student to self-assess his or her own work; i.e., discussion or self-assessment checklist. Together, the student and teacher can determine whether something was done well, according to the established criteria for success. The celebration of learning then becomes a team process!

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Reflection: Providing Appropriate Feedback to Learners

How do I/we communicate the criteria for success to students?

NOTES:

What use do I/we make of praise? Do I/we provide supportive information when using praise? (If you have requested a peer to observe your interaction with learners, you might want to ask for information on which methods you use most frequently in providing appropriate feedback to students.)

In what ways do students have an opportunity to participate in self-assessments related to their performance or learning process?

CHAPTER 6

Assessing Learning Progress

Assessing Learning Progress

"I have become more aware of what my students can do
because I am keeping better records.
I can communicate clearly to parents what the child has learned.
I do things more consciously and consistently."
(Teacher Quote)

Sources to Cons ider

- Alberta Education (1991). Educational Quality Indicators Projects.
- Arter, J. A. and Salmon, J. R. (1987). *Assessing Higher Order Thinking Skills.* Northwest Regional Educational Laboratory. Oregon.
- Bloom, Benjamin S., Madaus George F. and Hastings, J. Thomas (1981). *Evaluation to Improve Student Learning.* McGraw-Hill. Ontario.
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- Maeroff, Gene I. (1991). Assessing Alternative Assessment. *Phi Delta Kappan.* December. Indiana. pp. 272–281.
- Malarz, L., D'Arcangelo, M. and Kiernan, L. J. (1991). *Redesigning Assessment.* ASCD. Virginia.
- National Science Teachers' Association (1992). *Science Scope: Special Supplement on Assessment.* Vol. 15, No. 6. Washington, DC.
- Spady, William G. (1987). On Grades, Grading and School Reform. *Outcomes.* Vol. 6, No. 1. pp. 7–12.

The purpose of assessing student learning is to provide feedback to the learner regarding learning progress and to assist the teacher in making decisions about next learning steps. Assessment of learning is a continuous process of diagnosing learning progress. Apprehensions sometimes arise when references are made to "assessments", but effective teachers are continuously monitoring and adjusting instruction to promote continuous, essential learning for students. These adjustments are made as a result of assessing what students currently know and do.

Learning assessments are varied "snapshots" in time that occur within a planned and dynamic learning process. It is when teachers look at the snapshots to review learning growth over time that the process may appear to become linear or "static". Viewing the learning snapshots or reporting learning growth in a linear fashion does not in any way detract from the dynamic nature of the learning process!

Assessing student learning is a process in which, through a variety of measures,

learning growth is formally observed and documented. Using a variety of assessments is important, for these provide a broad "picture" of what students can do, what students could be learning next and which area requires more attention in the teaching and learning process. For example, a teacher may determine that the science and math concepts of graphing at Level One should be integrated and that students should be able to:

- demonstrate ability to collect data from the environment
- construct graphs, using pictures or objects
- discuss the results.

Assessment methods, in this case, might include a student's or teacher's anecdotal comments related to the **observations** of a child's data collection procedures. A **photograph** might depict a child's construction of a **graph** with a written **"story" or explanation** about the graphs. **Discussions** regarding the results might be **audiotaped/videotaped**. The teacher's records might show which students demonstrated learning of the concepts and which students require a new teaching method to support their learning. These assessments provide a picture of what a child can do. If the student had difficulty with any of the performances, the teacher could immediately determine where variations in instruction or opportunity to learn might be made.

Other measures useful in assessing student learning and growth might include:

- learner self-assessments
- teacher's criteria checklists or anecdotal notes
- work samples in portfolios
- pencil and paper criterion-referenced tests
- journals
- diagnostic tests
- games
- peer validations (with objective support)
- mentor feedback
- parent comments
- dramatizations
- project photos with summaries of learning
- a learner's creative problem-solving "stories" designed for peers
- interviews
- surveys
- participation in culminating celebrations.

If a student is to debate critically a real-life issue, the assessments might include a portfolio of **transcribed** or **taped interviews** given to a real-life audience, taped discussions of a "panel of experts", a summary of viewpoints and implications, and a **student decision**, supported by objective data based on the best information available. Such a set of assessments may be referred to as a **role performance**.

Opportunities for formal assessments of individual student growth should be provided when a student has already demonstrated that he or she will be successful at it. There is little point in requiring a student to "demonstrate learning" when observation and documentation indicate that success has not yet occurred. Rather, students should be given opportunities and time to learn and then qualify for an assessment when the concepts are understood.

Young learners require a wide range of concrete experiences in order to learn meaningfully. The transfer of learning from the concrete stage to the symbolic stage must be taught. We cannot infer that the transfer takes place because we allowed students to experiment with manipulatives. Assessments must reflect these learning needs of young children.

"Authenticity" is another word to use when trying to match an assessment with the appropriate demonstration of learning. Many measures used for assessing student learning are completed by students as they are seated at a desk. These methods may not adequately assess a young learner's ability to perform a task. The essential skills should be assessed in ways that provide meaning for the student. For example, an authentic assessment that allows students to demonstrate responsible citizenship might include the description or video of a student's voluntary participation in a school project that benefits the entire community. This is a real-life role performance assessment, which a student may wish to include in his or her portfolio or learning "resume".

Assessment strategies should be carefully planned to ensure that the information collected will clearly describe what a child can do within the learning continuum.

All assessments must be aligned with the essential knowledge, skills and attitudes learners are expected to demonstrate. If a student does not perform adequately on one assessment, another opportunity to learn should be provided, and another chance to assess or demonstrate learning successfully should be given. When students seek to assess more than once, the assessments should be parallel. That is, subsequent assessments should be neither more difficult nor less difficult than the initial assessment.

Assessment strategies should be carefully planned to ensure that the information collected will clearly describe what a child can do within the learning continuum.

It is imperative that assessments are aligned with what the student was expected to demonstrate successfully. If the instruction is focused on memorization of facts and the assessment requires students to demonstrate learning at the application level, the assessment is not aligned with instruction. Students are almost "guaranteed" to do poorly with this misalignment. This does not create self-confident learners. Similarly, if the environment is one that promotes exploration, discovery and creativity, and the assessment requires only that the student "fill in the blank", then a mismatch of the learning expectations and assessment process has occurred.

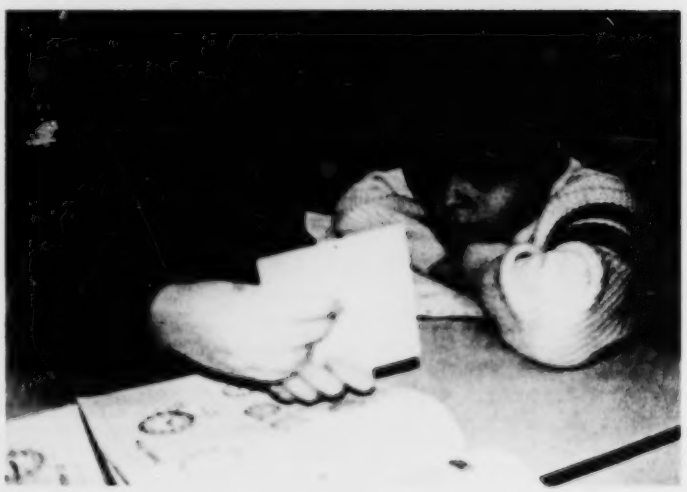
In all cases, the instruction and assessments should be aligned with what is important for students to learn; i.e., essential knowledge, skills and attitudes. Teachers need to be very clear on what constitutes essential learning and how this knowledge can be demonstrated. If the goal is to promote student thinking,

teachers need to develop both instructional techniques and matched assessments that allow students to demonstrate their ability to think. In this way, students begin to attach meaning to learning.

One way to match learning experiences and assessments is to ensure that, in the planning stages, the performance verbs match the content to be learned. For example, if a student is to **memorize** scientific facts, then the assessment could be a verbal or written recitation of the learned facts. If the student is to **synthesize** mathematical skills in a problem-solving format, the assessment could include the development, by the student, of an open-ended, real-life related question that incorporates the needed skills within the problem. This type of assessment is aligned with the essential concepts of developing the "computational competence required in personal, professional and daily experience" (Essential Concepts, Skills and Attitudes for Grade 12). Children continuously demonstrate their ability to think in many ways. Their celebration of thinking may only be "limited" by the types of assessments or learning experiences we provide or allow them to choose!

The use of technology in the area of assessing learning growth can certainly help to manage record keeping, assessment and the reporting process. Technological support can also promote the continuous learning progress of students by providing appropriate support for learning. Appropriate selection of software which is aligned with intended outcomes is a major consideration in the use of technological systems.

Children continuously demonstrate their ability to think in many ways. Their celebration of thinking may only be "limited" by the types of assessments or learning experiences we provide or allow them to choose!



"I wish we had had this process when we were going to school. I might have been a better student!"
(Parent Quote)

Reflection: Assessing Learning Growth

What types of assessment methods do I/we most frequently use to describe and document student learning growth?

How do these assessments reflect student growth in the essential learning?

What methods of assessment should I/we consider implementing to provide a broader picture of what each child can do and what he or she should be learning next?

What choices do students have in demonstrating their knowledge, skills and attitudes, in a variety of ways?

NOTES:

CHAPTER 7

Reporting Learning Growth

Reporting Learning Growth

Sources to Consider

- Alberta Education (1991). Educational Quality Indicators Projects.
- Simon, Sidney B. and Bellanca, James A. (1976). *Degrading the Grading Myths: A Primer of Alternatives to Grades and Marks.* ASCD. Virginia.
- Spady, William G. (1987). On Grades, Grading and School Reform. *Outcomes.* Vol. 6, No. 1. Oregon. pp. 7–12.
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Most parents appreciate knowing, specifically, what their child can do. Teachers need to be prepared at all times, to describe what learning is occurring and has taken place for each child. This knowledge will assist teachers in communicating with parents during and beyond the regular reporting or parent–teacher conference times.

Conferencing with parents provides teachers with another opportunity to show advocacy for children. The sharing of what each child can do enhances a learner's self-concept. Comparisons with others are avoided in order to maintain a picture of the child's own continuous progress. Since the student is an active partner in the learning process, he or she could be present at the conference to celebrate the learning.

All reporting should reflect a learner's growth within the essential learning outcomes. For example, if areas such as communication skills, social skills, emotional growth, and mathematical learning are essential learning outcomes, the report should reflect growth within those continua. The task of each staff is to find the best way of reporting growth in these areas. It is a tall task to ask the classroom teacher to be involved in instruction and research processes simultaneously, but this task is consistently performed by effective teachers. Teachers assess student learning continuously and they reteach, reassess and credit the learning when it occurs. From their knowledge about the current learning progress of their students, effective teachers are able to plan specifically for the next learning steps of each learner. This process forms the basis for the clear reporting of learning growth.

A variety of formats are generally used to report learner growth. All formats need to describe, succinctly, the current learning progress of each child within the different

continua. Just as a wide variety of assessments provides a broad picture of learning, a variety of reporting methods also provides a broad picture of learning and effective schooling. Variations in reporting methods may include:

- teacher comments or anecdotal records aligned with the criteria for learning at the various levels
- summary results of paper and pencil or demonstration performances
- audiotapes or videotapes of student performances, with criteria for successful learning identified
- picture summaries of student projects within the various learning continua
- checklists of student demonstrations of growth
- portfolios that include a variety of student work, checklists, audiotapes/videotapes of student performances, student's best works from one level to the next, and teacher and student comments regarding learner growth.

Reporting systems should reflect the "I CAN DO" learning growth of each student, given the criteria for learning established at each learning level. These are positive indicators of learning and promote the confidence of the learner to be successful at the next learning steps.

A comprehensive reporting system will include both qualitative and quantitative information to provide a broad-based view of the learning process.

A comprehensive reporting system will include both qualitative and quantitative information to provide a broad-based view of the learning process.

For example, student feelings reported through a survey may provide qualitative responses about school or about a program. These responses may also be reported quantitatively in order to describe the overall picture of how students are feeling.

The use of a variety of methods of reporting (i.e., qualitative and quantitative) will provide all stakeholders with a larger picture of what is occurring in schools and classrooms to promote learner success. Teaching teams should collaboratively review the data they have collected and develop improvement strategies based on trends established in the results. Effective teachers and schools continuously improve instructional processes based on their collections of learning results.

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Reflection: Reporting Learning Growth

What current methods of reporting do I/we use to indicate learner growth in all the learning outcomes defined as essential?

The following qualitative methods are used to describe the learning growth within each essential area.

The following quantitative methods are used to report the learning growth within each essential area.

How are the learning results reported? To whom are they or should they be reported?

What do my/our results indicate? Where should I/we place our emphasis for improvement?

What learning growth do I/we expect as a result of my/our improvement efforts?

NOTES:

CHAPTER 8

Home and School Connections

Home and School Connections

"It feels good to have your kids succeed."
(Parent Quote)

Sources to Consider

- Alberta Education (1986). *Bridges to Learning: A Guide to Parent Involvement.*
- Grossnickle, Donald R. (1989). *Helping Students Develop Self-Motivation: A Source Book for Parents and Educators.* NASSP. Virginia.
- Oakes, Jeannie (1990). *Making the Best of Schools: A Handbook for Parents, Teachers, and Policy Makers.* Yale University Press. New Haven.
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Teachers, schools and parents can establish numerous ways of keeping the communication lines open in order to support the learning of children. Some of these methods include parent information sessions, parents completing a child interest inventory, home learning activities suggestions, parental "survival" sessions, tutorial assistance processes, celebration phone calls, newsletters, brochures and sharing of talents and time in the classroom, just to name a few!

Offering parent information sessions at the beginning of the year assists to clarify what students are expected to learn within different levels along the continuum. For example, teachers can offer a session to parents and describe the essential content for each learning level. Teachers can explain that children will be given every opportunity to learn the concepts. The instructional process will promote learning in ways that best suit the child's learning style and time needed to learn. Parents are informed that students learn at different rates and in different ways. Then parents are invited to become involved in letting teachers know which learning processes best match their child's learning strengths. Parents may also be interested in completing a learning style inventory to assess their own preferred learning modes. In this way, they may better understand their child's learning strengths.

Parents frequently offer their support at such a meeting and invite teachers to call on them to provide further input or assistance.

Many teachers call parents when they realize a student may benefit from some assistance with a concept. The additional support the child receives may provide another opportunity for the child to learn the concept. Or, a teacher may provide "celebration" calls, or "happygrams" to parents letting parents know that their child has demonstrated progress or success in a certain area. Parents appreciate positive information about their child!

Parents welcome ideas for home activities that help the child in the learning process, but they also welcome process ideas that can help them to understand

why their child responds in certain ways. Parent "survival" tips have created much positive support for the learning process. Some tips for parents are:

- read to young children
- model personal enjoyment of reading and writing (e.g., writing "notes" to surprise a family member or a child — place it in your child's lunch bag!)
- actively listen to your child
- promote play at home (e.g., use of puppetry, drama, games)
- model and participate in team problem solving to promote thinking.

Newsletters can provide a positive connection between the school and the home. Parent newsletters developed for or with parents may include information regarding programs. Newsletters may also include tips for helping a child learn at home.

Offering parent information sessions at the beginning of the year assists to clarify what students are expected to learn within different levels along the continuum.

Brochures available at parent–teacher conferences provide meaningful information to parents. Brochures should describe a school's beliefs about learning, the programs offered, and some annual celebrations of learning.

Parents are best able to provide information about how they can become involved in a child's learning process. A parent form might include a list of talents and time he or she would be interested in sharing with an entire group of learners.

An exciting home connection is the invitation for parents to come to see their child's work in the classroom. Day or evening celebrations can showcase each child's learning. Students may plan the evening, or they may be invited to share their favourite works, such as a poem, a story, a drama, a videotape, a science project, an unconventional invention, a rhyme, a riddle, a joke, a song, or a problem solved through a collaborative process! This evening may be a culminating event that displays the various learning activities within a theme. This is another way to bring learning to life!

Reflection: Home and School Connections

How do I/we currently encourage parental involvement in a child's education?

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What other methods might I/we consider implementing to support or complement our current efforts to involve parents?

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CHAPTER 9

Stories by Teachers

Stories by Teachers

Note: *Student names used in these stories are fictitious.*

"I've Got the First-Year Teacher Blues"
by Michelle Phair

As a first-year teacher, the principles of Outcome-Based Education within a continuous learning context seemed like an extension of all the methods classes I had just completed in university — all children can succeed, instruction should be focused on the learner, children should learn the concepts and be able to apply them in order to have the skills necessary for the next learning levels. Obviously, if a child doesn't understand one concept, how can he or she learn the next concept which builds on the first? Also, if a child gets positive reinforcement and feels successful, he or she is willing to experiment and take risks. A child who experiences failure and feels negative about his or her abilities will be less willing to take risks and will feel insecure and negative about new concepts. Learning skills, particularly in math, are developmental and what one child can grasp easily using only abstract examples, another child cannot grasp without first using concrete manipulatives and much practice.

Obviously, if a child doesn't understand one concept, how can he or she learn the next concept which builds on the first?

I guess every first-year teacher has to go through a process of transferring his or her ideals into a workable method that can be used in the actual classroom. Instruction and success for all are wonderful ideals that theoretically make learning challenging and exciting for every student. In September, I was bright-eyed and enthusiastic about making each child feel successful and having each child master all of the required concepts. That was the beginning of September.

By the end of September, I was frustrated, disillusioned and way behind in my plans. How could I ever get anything done with twenty-eight students, at approximately three different learning levels, to master each concept? At the time, I thought I had to wait for everyone to be at the same spot before I could go on to the next concept. Some students caught on right away and mastered the concept. Others took a week longer and I spent all kinds of planning time racking my brain, trying to come up with ways to challenge the ones who were done and to keep them occupied.

At a team meeting with other teachers, I got some practical information that I tried to apply in my classroom to make things easier. I didn't always have to test on paper or in the same way for every concept

— the student just had to show me he or she knew what I was asking them to do. Students who did not master the concept immediately could do extra practice and demonstrate to me that they could do the second assessment. This would eliminate the attitude of irresponsibility developing in my students—they thought they could always do a second assessment, so why bother studying!

The biggest problem I have, and which will probably become less serious next year, is that my textbook resources do not always match the curriculum concept outcomes. I asked about that at our team meeting—were there resources to correspond more appropriately with the curriculum outcomes? I was told that textbooks do not always match the outcomes. I was quite right in that regard! However, there were some samples of units developed, but not enough had been completed to develop a bank of lesson plans. Also, teachers had agreed that they did not wish to develop such a bank because each year the lessons would need to be adapted to a new group of learners. They did not like the idea of a packaged or a "canned" program and had insisted on wanting to individualize instruction in their own way. I would have done anything for a "packaged" program in this, my first year of teaching. I think if I had a standard resource, I would have more time to individualize it for my students.

But then again, what is "standard" in a classroom of dynamic learners? I'm really envious of teachers who have been teaching for a few years because they are able to instruct with a focus on individual learning strengths, the way it should be. The teacher can become a facilitator, while each student masters the concepts at his or her own developmental rate.

I look forward to the day when I can be so organized and secure in my teaching skills that I become one of the teachers who creatively instructs the concepts and comes up with the instructional styles and resources that promote learning for each student.

In the meantime, I continue to develop my own style through my first-year struggles. I am told that I am doing well but sometimes I find that hard to believe! I am trying to teach my students so that they will learn. I use manipulatives, practice and assessments methods that correspond with the outcomes to be demonstrated. The record keeping is different — I keep an eye on how many reassessments a student attempts because I feel this is a reflection on accuracy. I use peer coaching and enrichment to try to keep them learning cooperatively because that also is an essential skill!

I don't worry so much about everyone being at the same spot or doing the same thing to show that they know the concept, because students learn in different ways. Having reflected on it, maybe I am doing a lot of things well!

"Darcy's Story"
by Marg DeHoog

My name is Darcy. I am in Grade 3. My favourite subject is math because I almost always get everything right.

Today we're beginning a new unit. I find if I listen carefully to my teacher's instructions, the activities are easy.

I get right down to work and after I finish, I often have time for some extra activities. Sometimes I work with manipulatives, sometimes I have a package of prerequisite activities or sheets (these are fun to do because you have to read and think), and sometimes I help another student.

After my work is done, I write my test. I almost always do well the first time. There are only a few questions and every question is like what was in my activities or practice sheets.

When I'm one of the first finished, my teacher lets me go to Grade 1 or Grade 2 to help them.

Sometimes my friends make some mistakes. Then they may work with the aide, practising the work in different ways so they understand it.

I like this way of learning because everyone can get more than one chance to learn and do their best work!

"I like this way of learning because everyone can get more than one chance to learn and do their best work!"
(Student Quote)

An "Aha" Moment in the Life of Teaching
by Lisa Hilsenteger

The bell rings to signal the end of recess. This is probably my favourite time of the day because math is about to begin. It is the only subject that I feel I am prepared for.

After everyone is settled, I begin my five minute review and a ten to fifteen minute instruction and start the students off on their practice work or assignment for the day. They always seem the quietest during math and I feel so proud as I circulate around the room passing on to them a little bit of knowledge that I hope they will carry with them down life's winding road. As I stand back for one brief moment and scan the room to see that everyone is on task, I remind myself of the enjoyment I receive in being a sixth grade teacher.

Suddenly I am awakened from my reverie by a tap on the shoulder, and standing beside me are six students with their notebooks in hand. I hear music from *Jaws* playing in my ears as a voice says to me, "What do we do when we're finished?"

I panic as I notice that there are still fifteen minutes left before math ends. This was not supposed to happen! It wasn't in my plans! This work should have taken them the entire class time! What do I give them to do?

That night at home I slump over my plan book as my dreams of ever becoming organized are shattered. Those words are pounding in my head, but finally it occurs to me that the unexpected has happened; these students want to continue learning. I head to my computer with my curriculum outcomes for the year and my teacher's guide. I type up an assignment sheet that lists all the pages and assigned questions that they will have to complete for each separate outcome in the unit. All activities are listed in the order in which they can be completed—from the extra practice to the enrichment activity following their outcome assessment. It takes a couple of days to get organized. Each learning step is placed into well labelled folders and filed in my cabinet so that the students can easily retrieve what they need.

The students are elated with the news that they will be able to work ahead and demonstrate their learning when they have met the criteria for the prerequisites. They complete the assignments which will "qualify" them to demonstrate their learning. That day, a small group is working in the hallway, some are paired up to help each other out and a few are patiently seeking my help. I wait on pins and needles, expecting someone to ask the forbidden question. As the end of the class draws near, I close with a final review and the students prepare for the next activity. I breathe a sigh of relief.

It makes it all worthwhile when, at parent-teacher interviews, I hear, "My child is really enjoying math this term and I'm so pleased with his progress", or "My daughter tells me that she is able to work at her own pace in math. Will she be able to continue this all year?"

I'm still not the most organized teacher, but at least I can stand back during a few rare moments and remember what it is that I enjoy so much about teaching.

Reflections about Teaching and Learning
by Darlene Kelly

Teachers are faced with tremendous challenges and stresses today. Technology and expectations are at levels never dreamed of before. As well, we have the integration of a wide variety of learner strengths and needs in the classroom. This puts additional demands on the homeroom teacher.

Everyone, including the teachers, wants the best for every individual student. The question is, "How can we, as teachers, help students achieve what we believe is essential?"

We are giving students a chance to succeed and show their true capabilities.

Sheer dedication and determination are not the only magic ingredients. The students must become self-motivated learners. It is our responsibility to help the students reach this outcome.

The students must be able to take an active role in the learning process. They must be prepared for the demands of our very modern and technological world. Students must be able to think in a logical manner. They need to develop superb time management skills to cope with the ever increasing workload. In order to accomplish these skills, the students must learn how to decipher what is relevant and what is not. Students must also learn how to study so that they can handle and retain the vast amount of knowledge to which they are exposed on a daily basis.

Instruction based on student outcomes and curriculum learning promotes learning through practice and effort. As a student practises previously acquired skills, continued learning can occur. We are giving students a chance to succeed and show their true capabilities.

Traditional learning emphasizes an approach that involves extensive memory work and application of set formulas. Outcome-based instruction based on the previous successes, allows each student to proceed at his or her own pace. The capacity to learn is reflected in the ability to solve problems and to succeed in each outcome! This process creates its own rewards. As a student equates success with effort, there is a tendency to try harder. Because the continuous progress approach allows for reassessing and crediting learning when it occurs, a student should never feel defeated. Continued efforts and opportunities to learn will allow all students to achieve good results, but not all at the same time. Offering individual assistance provides the student with an opportunity to improve the learning results more quickly and the teacher is more aware of the concepts that need to be retaught or reviewed.

Various teaching styles can be successfully used in the classroom. You can use manipulatives, oral questions, board work, seat work, etc., on an ongoing basis. Students who need to see things visually are having their needs met. Other students, who need oral presentations, or discussion opportunities, are also accommodated.

Parents are also aware of their child's strengths as they move from one learning level to the next. The teacher can say,

"Your child is able to identify and name place value of whole numbers up to hundred thousands, using standard and expanded form", and produce student work samples to show the student's capabilities. Parents are able to see more clearly what a child can do and can provide positive feedback to encourage continued success.

The Primary Picture: Individual Success in Learning
by Edith Morgan

When my special needs student, Justin, arrived in my classroom, his attention span was limited, his output was very low and he took little responsibility for himself in the classroom. In other words, his behaviour was disruptive and he had few cooperative skills — all results of a seemingly low self-esteem. His reading skills were below grade level but his math skills were appropriate to grade level.

My personal philosophy about student learning meant that I believed Justin could experience success, given time and opportunity to learn. I also firmly believed that his perceived failure was merely incomplete success. Convinced that quality schools can intervene in the educational process and promote success for a student, I maintained my belief that Justin could develop a positive attitude toward self and others. So I began to plan the curricular learning outcomes around his current learning strengths, so I could show him that the next steps were easy!

For starters, my goals for Justin were to help him:

- improve his reading level
- develop positive self-esteem
- control his disruptive behaviours
- lengthen his attention span
- improve his interpersonal skills and, last but not least, to
- develop a sense of responsibility and direction.

To achieve these goals, I had to make the classroom learning environment an attractive one and encourage Justin to recognize quality in himself so that he could produce quality work.

I set to work, trying to avoid power conflicts with Justin. In this way, perhaps he would be alleviated of any stressors that might affect the reception of new learning. I tried to create a warm, non-threatening teacher/student relationship by practising a "hug-a-day" and consistent and positive discipline. Together, we developed a daily routine and outlined the outcomes for the day. The learning outcomes had to be specific to fulfil Justin's present needs. For example, he was not expected to produce a fully developed story when his real success at this point lay in producing a descriptive paragraph. I anticipated some behaviour problems and we outlined consequences. Flexibility was the order of the day. Justin was encouraged to pursue an activity as long as his concentration would allow. Frequent rewards were given for small outcomes of success — brain-teasers, math games, puppet games, developing board games, computer time, story tapes, story time with an adult, or art centre time.

The efforts to help Justin recognize quality in himself and produce quality work included the following strategies. I needed to lower his frustration levels by providing time for mastery, by giving second chances to learn through reteaching, conferencing, oral assessment, if necessary. I pulled no surprises — no demonstration of mastery would be expected until all the practice was well done. I encouraged him to display his work and to share it with a small group or with the class. Group work and partnerships with independent, well motivated students were encouraged. Again, we outlined the rules for behaviour and respect toward others in the group. I encouraged his leadership through peer tutoring roles where possible.

I maintained my high expectations and the belief that low performance is not failure, just incomplete success.

I encouraged Justin to demonstrate his learning in alternative ways; for example, through making filmstrips, videos, audiotapes, puppets, posters, or through drama.

Frequent contacts were made with the home. As well, the baby-sitter assisted in parenting and education strategies. In class, learning assistance was provided for reading, to supplement the whole language approach to language learning.

In communicating Justin's learning progress, I supplemented the reporting system by outlining Justin's mastery of the outcomes to date or in progress.

Justin stayed with us for only a few months. During this time several people, including administration, noticed some positive changes in Justin. He was exhibiting a greater sense of responsibility for self and work. More assignments were completed and handed in. His originally disruptive classroom behaviour was greatly reduced, as were yard play fights. Other students chose to work with him and he began to ask questions about the next unit or outcome. His reading was now at the next level and he had created several pieces of quality work — a report on animals and some recorded science experiments.

> My personal philosophy about student learning meant that I believed Justin could experience success, given time and opportunity to learn.

Although I have focused on Justin, all of these opportunities should be available for EVERY elementary student, to facilitate learning and success. That is the goal in my classroom. Individual student profiles of learning outcomes, mastered or in progress, and behaviours must be passed on to the next level teacher in order to maintain continuity in learning. My involvement with implementing this outcome-based, continuous progress project in our school has definitely helped me to develop and monitor strategies for accommodating individual learning strengths and needs. I have also had the good fortune of working collaboratively with others who help to integrate the special needs students, like Justin, into the classroom.

"Success: What A Feeling!"
by Moira St. Amand

"Wow, I got all one hundred percent!" yelled an amazed student. "This is wild!" The happy expression on this student's face when he received such successful marks on his math assessment was proof to me that implementing high expectations and having students achieve them was a good idea.

When this process of continuous learning with high expectations for every child's success was first introduced to me, I was dubious. I mean, why would I change the system of how I teach math? Most of the students I taught had always been successful in passing (at least 50% of the material) and a few had received honour marks. I was also skeptical about breaking down one large curriculum objective into a task analysis or into several prerequisite outcomes. We would not be following a textbook program. Rather, we would be making our own performance assessments instead of using the ones "at the end of the chapter". Certainly, I thought, the intelligent people who put these textbooks together are more qualified than myself at designing a math program. I still believe this, but now I think the teacher can adapt the textbooks to be more of a resource rather than a guideline. I also now believe in making the whole process a high-achieving and positive experience for the students.

"This is wild!" The happy expression on this student's face when he received such successful marks on his math assessment was proof to me that implementing high expectations and having students achieve them was a good idea.

Does this sound confusing? Well, I felt confused at the beginning of September when I was told our school is an Outcome-Based school. The theory was introduced to all of us bewildered-looking new teachers, but it was going to be another thing to put it into practice. Thanks to the collaborative process, which involved sharing ideas with other teachers, I discovered it was not as difficult as I had first believed. My colleague and I worked together to break down the outcomes to be learned by students. For example, one week we would practise multiplication by 0–5. We were then able to work on these certain outcomes with our classes at the same time. This way, if any of our students were having similar successes or problems, we could use our teacher aide time jointly for a certain small group of students from both classes. In addition, we could alternate developing performance assessments which were clearly aligned with the outcomes. Since this process deals so much with students' particular areas of strengths or needs, we are fortunate to be able to determine clearly which areas need assistance and which areas have been learned well.

The two most positive aspects about this process to me are, first, the students must achieve mastery on their outcomes. If they do not, they are reinstructed on these particular outcomes until they can achieve mastery. Not that they stay behind when a new outcome is introduced,

but they have the opportunity to demonstrate their learning of the outcome when they are ready. It's great that the students do not have to do the entire assessment over again but only the outcome for which they did not achieve mastery. As a final result, they are either marked incomplete, showing that they are still in the process of learning the concept, or, for the most part, the students are facing these wonderful marks and saying "Wow, I did that!" I have found that even a difficult student, who didn't care what he achieved in school, was ecstatic when he received his first 80%. Since then, he has made sure all his performances are 80% or over — what a feeling of success!

The second positive aspect is the fact that since the process is designed down to specific outcomes, a teacher and student know exactly which skill is posing a problem. It is much easier to focus on one isolated area than a whole unit of skills.

In our class, we have "catch-up" days. These days are specifically set aside for students who wish to be reassessed after practicing certain skills. The students who do not need reassessments work independently, or in small groups, on enrichment activities. These activities include: problem-solving opportunities, computer skills, math games and helping other students.

In all honesty, I must say I really like this whole idea and so do the students. It takes practice and good organizational skills to make this work. Hopefully, I'll get better at this in time. Now if only I could keep the top of my desk clean!

Collaborating to Promote Student Success
by Fran Rumball

It was August, 1990, and the students would be returning to the classroom within a few days. The staff at St. Gabriel School had been meeting to review and discuss the implications of the Outcomes-Based Education process which we were about to implement.

After participating in one of the discussions, I reflected for a moment. As a so-called "experienced teacher", the most difficult part of the process was to break out of my old teaching style and allow myself to experience this new teaching style!

I had no trouble accepting the basic philosophy of the process, but putting it into practice was challenging, to say the least. When I look back at it, it was a little like starting over as a first-year teacher. I had lots of questions, but, then again, so did my colleagues. In fact, after being with the process for one and a half years, we still have lots of questions. Perhaps that's why the commitment to the improvement process is still there — we are making changes together. The process is a challenge worthy of our time and effort!

Speaking of time, there is no doubt that we have put a lot more hours into the process than we thought possible. How easy it would be to say, "Open up your books to page 167 and do questions 1–20", or "We are going to do the test at the end of the chapter. You'll find it on page 179!"

We are making progress: we maintain a clear purpose for teaching, observe student performance and note any difficulties the students may have. We continue to improve on developing methods of assessing, establishing criteria for assessment, and matching teaching with learner strengths and needs.

There is no doubt that this process helps us align our teaching more closely than ever with what we believe is essential for students to learn, and with the details of the curriculum. In this respect, it is easy for the teacher, the student and the parent to be continuously aware of what has been learned and what is yet to be mastered. Everyone, then, becomes involved in the learning and accountability process!

> In sharing our thoughts and ideas, we learned how to address those issues for which we did not have immediate answers on our own.

While the program is set up for students to learn at their own rate, the actual ability for any one person to cater to all the various levels can certainly be a challenge, but, then again, this is nothing new! With the help of my teacher aide, the students who need extra help to achieve an outcome have this opportunity, for reteaching is available to them. Since the performance assessments are broken down into task-analyzed outcomes, it is easier to determine where the student is in the learning process.

Something else that has worked well, and should be used more, is matching the students from the same general levels, but in different classes, according to their strengths and needs. While one teacher supervises the enrichment activities with the students who have completed the outcome, the other teacher reteaches the outcome for students who need it. The groups, in this way, are continuously changing. This process helps to keep both teachers working together closely, a benefit for everyone!

Recently, I had five students who were able to achieve the outcomes quite easily. After they completed the demonstration of mastery, they were able to participate in an enrichment activity while I concentrated on the other students. Those five students still completed the performance assessment and then volunteered to help me lead small groups for more individualized learning. The learning and teaching process became a very collaborative one!

How do the students feel about the process? Most of them find it easy to follow, and very rewarding! When Tommy says, "Oh yeah! What a stupid mistake I made! I know where I went wrong", it's great to provide him with the means to show that he can do it well.

Not all students, however, have Tommy's desire to do better. During the first year of the process, I spent much time encouraging and coaching students. The encouragement and opportunity to demonstrate mastery are always there. It is also up to students to make their decision regarding their involvement in improvement. This is a part of the essential learning called "responsibility for learning"!

When I look back over the inservices and planning opportunities we have had available to us, I have to highlight one thing that was very valuable to me. The sharing sessions that we had as teachers proved to be extremely beneficial. In sharing our thoughts and ideas, we learned how to address those issues for which we did not have immediate answers on our own.

We still have a lot to learn about teaching for student success, and we still need to ask ourselves, "How do we coordinate providing for all the varying learner needs? Has the child really shown mastery? Are the performance assessments an adequate representation of what we want the students to demonstrate at higher levels of thinking?"

It will take time to answer all these questions, but, as I stated earlier, as long as we are asking questions, we are challenging ourselves and committing ourselves to the continued learning success of our students!

At Least, and at Last: A Few Words from an Administrator
by Rae Molzan

The positive comments of parents, students and teachers reinforce for us that outcome-based, continuous progress learning is successful in math as well as in other subjects. Student achievement, parent support and satisfaction, and teacher responses are positive indicators of this process.

I have taught math before and after the implementation of outcome-based instruction and I believe it:

- increases student ownership in the learning process
- promotes student vision of success and helps them to attain it in order to be successful at the next level
- requires extensive documentation of student learning.

I see the group dynamics in classrooms changing due to the fact that the mastery groups are continuously varied from one outcome to the next. The learning environments are not static, they, too, are continuously changing to provide learning opportunities matched with varying learning styles; e.g., small group, large group, at desks or on the floor! I see students at task in humming, buzzing classrooms and student responsibility for learning increasing! Much of the knowledge about student learning styles has come from direct observation of student choices.

Teachers have moved from being teacher-directed to being learner-focused. They are facilitators of the learning process rather than being lecturers for the majority of the time.

The teacher workload has increased initially, with expanded opportunities, material preparation and collaborative efforts through meetings and planning days.

However, the results are worth the process. We are reaching more students versus teaching to the middle of the class. This is very rewarding to me as a teacher.

Teachers have moved from being teacher-directed to being learner-focused.

Teachers sometimes have made direct learning connections for students as a result of the initial instruction. Sometimes, student learning connects just around the edges and some reteaching needs to occur. At least, and at last, we are making many more connections!

Effective Schools Research acknowledges that family background contributes to student success but disagrees with conclusions of previous research that family background determines a child's educational attainment.

CHAPTER 10

Summary and Implications

Summary and Implications

The role of educators is an exciting one. Teachers have the opportunity to establish learning environments that promote curiosity and a natural desire for learning. A child's success experiences within the classroom can promote an "I CAN LEARN" attitude. Such an attitude can remain as a lifelong reinforcement of each child's true capabilities.

Teachers also have the opportunity to deliver excellence in curriculum. This provides the means through which each child can experience learning success. Curriculum that focuses on essential learning and integrates all the details into this framework creates meaning for students. An excellent curriculum shows students how previous learning fits with next learning steps. It encourages teachers to provide continuous positive feedback regarding each child's learning progress.

The key to establishing a healthy learning environment and excellent curriculum lies with each teaching team. Collaborative efforts must determine how a continuous learning, results-based and integrated curriculum will be delivered in each school. Once teams begin to plan for these curriculum processes, they realize that the concepts are closely aligned. Teachers also can better understand how excellence in curriculum promotes learning success.

Teams must remember that improvements occur over time. A long-term vision for improvement must be maintained in order to implement responsive and responsible educational improvements.

Through collaboration, healthy learning environments and excellence in curriculum, teachers continue to make a positive difference in the learning success of students. The positive difference is the result of the belief that "every child can learn"!

Reflection: Summary and Implications

In reading the previous chapters and completing the reflection and discussion questions, what new insights have I/we made?

How are my/our beliefs about teaching and learning communicated to students, parents and the community?

Which indicators of learner success provide the best picture to learners, parents and community, that my/our beliefs and schooling processes are in good health?

What am I/are we doing well, as suggested by the indicators?

What improvements do I/we suggest as a result of the information collected?

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Appendices

Appendix 1: Establishing a Framework for Essential Learning

Appendix 2: Results-Based, Integrative Planning

Appendix 3: Accommodating and Encouraging Learner Strengths

Appendix 4: Problem-solving Process: Collaborative or Individual

Appendix 5: Guide to Teaching for Thinking

Appendix 6: Profile of Student Thinking

Appendix 7: Learning Style Profile

Appendix 8: Language Learning Environment Indicators

Appendix 9: Language Learning Indicators

Appendix 10: Continuous Progress in Mathematics Learning

Appendix 11: Math Outcomes and Student Progress Record

Appendix 12: Task Analyzed Math Learning Outcomes

Appendix 13: Continuous Progress Mathematics Report: A Seven-Year Picture

Appendix 14: Anecdotal Student Learning Profile — ECS

Appendix 15: Learner Self-assessment Report

Appendix 16: Results-Based Lesson Plan

Appendix 17: Profile of Results-Based Instructional Practices

- Defining the Essential Outcomes
- Focusing on Outcomes and Student Progress
- Allowing Appropriate Time and Support for Learning
- Having High Expectations for Success
- Providing Appropriate Feedback to Students

Appendix 18: Colaborative Planning for Educational Improvement

Appendix 1

Establishing a Framework for Essential Learning

Vision:

We want all students to be:

Collaborative Workers
Higher-Level Thinkers
Responsible Citizens
Effective Communicators
Competent Achievers in Math/Science
Self-directed Learners
Creative Performers

Collaborative Worker
- generates ideas in a group
- interacts positively with others
- peer tutors
- listens actively
- empathizes
- leads group effectively
- works cooperatively with others

Competent Achiever in Math/Science
- applies basic knowledge of math/science principles in new, real-life situations
- explores new learning by connecting with prior knowledge
- uses technical reading and writing skills
- uses inquiry method to explore and test ideas/ principles

Effective Communicator
- expresses self through multiple frames of reference; e.g., writing, speaking, music, art, drama
- sees the "big" picture
- organizes thoughts and ideas
- considers audience needs for meaning

Responsible Citizen
- contributes time and talents to efforts that benefit family, community
- shows respect for and value of others
- accepts responsibilities and completes them appropriately
- formulates and displays values that positively affect self and others

Higher-Level Thinker
- applies basic principles to new situations
- analyzes a concept or situation
- produces innovative ideas
- generates solutions
- selects best solutions based on criteria
- develops and implements a plan
- evaluates plan based on criteria
- uses information, technological resources and skills

Creative Performer
- creates quality products in the arts
- expresses and presents ideas creatively
- generates many ideas
- elaborates on ideas
- designs or constructs original products
- risk-takes the implementation of new ideas, within criteria

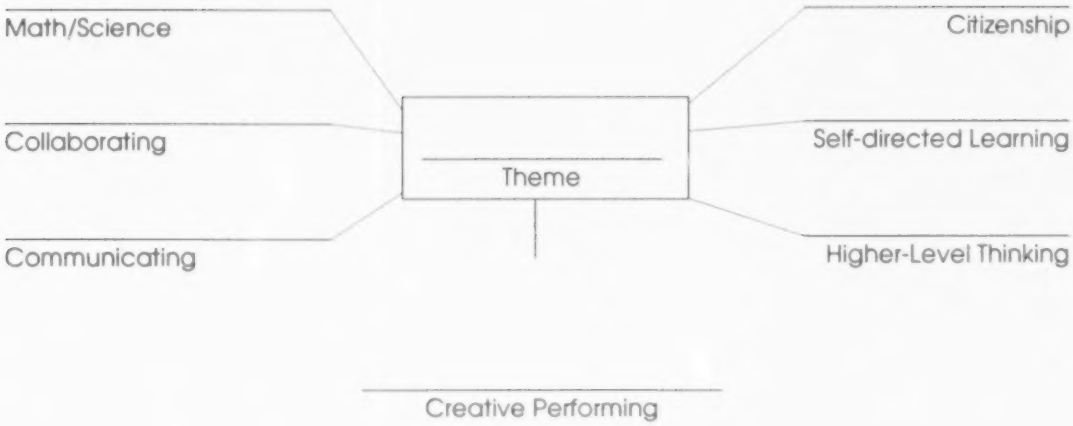
Self-directed Learner
- takes initiative to explore learning in new areas
- faces challenges with optimism
- learns from the past and sets new goals and priorities
- monitors and evaluates progress
- perseveres in appropriate tasks and situations
- maintains personal wellness/fitness program
- celebrates learning

Planning to Integrate Learning (Themes, Skills):

Phyllis Geddert

Appendix 2

Results-Based, Integrative Planning



Knowledge, Skills, Attitudes Focus	**Performances ← Student Choices → Assessments**			
	brainstorming	concept mapping	researching	Concept Web
	questioning	interviewing	discussing	Videotape
	identifying	hypothesizing	leading	Audiotape
	explaining	debating	justifying	Portfolio
	editing	writing	adapting	Checklist
	describing	listening	initiating	Game
	predicting	speaking	negotiating	Puzzle
	planning	respecting	playing	Model
	organizing	reporting	constructing	Report
	applying	drawing	assessing	Conversation
Prior Skills Required	comparing	singing	communicating	Photograph
	contrasting	choosing	demonstrating	Project
	creating	analyzing	interacting	Demonstration
	composing	inferring	elaborating	Explanation
	dramatizing	stating problems	summarizing	Test
	designing	generating	solving	Self-assessment
	graphing	distinguishing	reviewing	Discussion
	computing	classifying	presenting	Debate
	moderating	evaluating	contributing	Work Sample
	collaborating	modelling	deciding	Story
	encouraging	teaching	expressing	Song
	paraphrasing			Dramatization
				Other _____

Criteria for Successful Performance:

Appendix 2 (continued)

Results-Based, Integrative Planning

Knowledge, Skills, Attitudes Focus

Prior Skills Required

Performances ← Student Choices → Assessments

brainstorming	concept mapping	researching	Concept Web
questioning	interviewing	discussing	Videotape
identifying	hypothesizing	leading	Audiotape
explaining	debating	justifying	Portfolio
editing	writing	adapting	Checklist
describing	listening	initiating	Game
predicting	speaking	negotiating	Puzzle
planning	respecting	playing	Model
organizing	reporting	constructing	Report
applying	drawing	assessing	Conversation
comparing	singing	communicating	Photograph
contrasting	choosing	demonstrating	Project
creating	analyzing	interacting	Demonstration
composing	inferring	elaborating	Explanation
dramatizing	stating problems	summarizing	Test
designing	generating	solving	Self-assessment
graphing	distinguishing	reviewing	Discussion
computing	classifying	presenting	Debate
moderating	evaluating	contributing	Work Sample
collaborating	modelling	deciding	Story
encouraging	teaching	expressing	Song
paraphrasing			Dramatization
			Other _____

Criteria for Successful Performance:

P. Geddert, R. Lindsay

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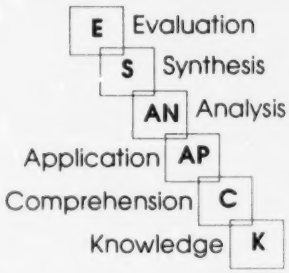
Appendix 3

Accommodating and Encouraging Learner Strengths

Learner Preferences	Notes/Student Comments
Absence/Presence of Sound Direct/Diffused Lighting Warm/Cool Temperature Structured/Random Design Work Alone/With Peers Holistic/Sequential Reasoning Visual/Auditory/Tactual Perception Mobility: Critical/Not Critical Intake: While Learning/Not Critical Time to Learn: AM/PM Sources: Perrin, Dunn & Dunn, Kolb & McCarthy.	

Learner Process and Assessment Choices



brainstorming	graphing	singing	adapting
questioning	computing	choosing	negotiating
identifying	moderating	analyzing	initiating
explaining	collaborating	inferring	playing
editing	encouraging	stating	constructing
describing	paraphrasing	generating	assessing
predicting	concept mapping	solving	communicating
planning	interviewing	distinguishing	demonstrating
organizing	hypothesizing	classifying	interacting
applying	debating	evaluating	elaborating
comparing	writing	modelling	summarizing
contrasting	listening	teaching	reviewing
creating	speaking	researching	presenting
composing	respecting	discussing	contributing
dramatizing	reporting	leading	deciding
designing	drawing	justifying	expressing

Concept Web	Model	Photograph
Videotape	Portfolio	Music Performance
Discussion	Conversation	Audiotape
Debate	Project	Checklist
Explanation	Story	Design
Game	Song	Sketch
Puzzle	Dramatization	Decision
Self-assessment	Dance	Test
Demonstration	Poem	Research
Oral Presentation	Interview	Bibliography
	Goals Statement	Thesis Statement
	News Article	Hypothesis
	Advertisement	Display
	Letter	Experiment
	Map	Lesson/Tutorial
	Report	Editorial
	Worksheet	Newsletter
	Poster	Brochure
	Survey	Skit
	Outline	Overhead
	Exhibit	Invention
	Terrarium	Philosophical Quote
	Baked Delight	Riddle
	Problem Statement	Graph
	Question	Picture Dictionary
	Sculpture	Carnival
	Novel	Readers' Theatre
	Bulletin Board	Summary

Competent Achiever in Math/Science **Responsible Citizen** **Higher-Level Thinker**

Effective Communicator **Self-directed Learner** **Creative Performer** **Collaborative Worker**

P. Geddert, R. Lindsay

Appendix 4

Problem-solving Process

Collaborative or Individual

Problem Statement

The problem is_____

Problem Finding

Now that you have stated what you believe is the problem, list five to ten other problems that might be associated with, a part of, or causing, your stated problem.

_____ _____
_____ _____
_____ _____
_____ _____
_____ _____

Problem Selection

Put an * beside the problem you believe to be the main problem, and one which you would like to work on solving. (Later, you can choose another problem* to work on, if you wish.) Now rewrite your problem statement in the form of a question: "How might we_____so that _____?"

Brainstorming Solutions

List ANY ideas that come to you regarding how the problem you just stated could be solved positively, and with consideration for others.

_____ _____
_____ _____
_____ _____
_____ _____
_____ _____
_____ _____
_____ _____

Put an * beside the ten solutions you believe are the best ones for solving the problem.

Developing Criteria

List five important considerations you want to remember in selecting a solution.

We/I want a solution that will A _____
B _____
C _____
D _____
E _____

Evaluating Solutions

Choose five of your ten best solutions (*) and rank them (down) on each criterion from a scale of 1–5, 5 being the best match with the criterion.

	Criteria					
Best (*) Solutions	A	B	C	D	E	Totals
•						
•						
•						
•						
•						

Which solution ranks the highest when matched with your criteria? _____

• Write a "commercial" for your best solution.

Source: Crabbe, *Future Problem Solving Program*, 1983. *Phyllis Geddert*

Appendix 5

Guide to Teaching for Thinking

Thinking Process	Description	Student Involvement	Teacher Facilitation
Knowing	Recall of Specific Information	Reflects/Responds Absorbs Remembers Recognizes	Directs Tells Shows Questions
Comprehending	Understanding of a Concept	Reflects/Explains Translates Predicts/Infers Demonstrates	Questions Listens
Applying	Using Methods, Principles and Theories in New Situations	Solves Problems Uses Knowledge Constructs	Shows Observes Guides Critiques
Analyzing	Breaking Down a Communication/Concept into Its Parts or Elements	Discusses Inquires Compares Contrasts Researches	Probes Guides Observes
Synthesizing	Putting Together Parts or Elements to Form a Whole	Discusses Designs/Creates Composes	Reflects Accepts/Extends Analyzes
Evaluating	Judging the Value of Materials or Methods through Applying Standards and Criteria	Judges Disputes Rates Chooses	Accepts/Extends Harmonizes Promotes Use of Criteria

Summary Chart of Question Types, Discussion or Task Choices

Knowledge	Who? What? Where? When? Why? Define. (Assumption: All information previously introduced to student.)
Comprehension	Describe. . . . What is the main idea of (this paragraph)? Tell in your own words. . . . What do you predict will happen? What was the cause of . . .? What was the result of . . .? (Assumption: All information previously introduced.)
Application	How would (character) act in this new situation? Apply this math principle in the following examples. . . . Demonstrate. . . . What is the latitude of . . . ? (Assumption: Student applies knowledge and understanding in new situation.)
Analysis	What evidence can you find to support . . .? Compare and contrast. . . .
Synthesis	How can we improve . . .? Can you think of (a title for this drawing)? What other endings would you suggest for this story? Write a play integrating the moral. . . .
Evaluation	Which do you think is better? Why? What criteria did you use? What is your opinion about . . .? Why?

Adapted from *Bloom's Taxonomy of Educational Objectives,* 1981. *Phyllis Geddert*

Appendix 6

Profile of Student Thinking

Student Name: _____ Age: _____

School: _____ Date: _____

Attitude Toward Thinking	1	2	3
demonstrates an awareness of personal attitudes and values			
demonstrates an awareness of personal thinking processes			
shows a willingness to take risks			
displays the ability to capitalize on errors and failures			
displays a sensitivity to new ideas			
respects novelty and intuition			
possesses a desire to explore ideas beyond what is presented			
possesses a desire to reason well and base judgments on evidence			
perseveres in searching for ideas and solutions, even if not apparent			

Example	Date

Thinking to Create	1	2	3
demonstrates the ability to defer judgment and remain ambiguous			
produces many ideas with ease			
shifts perspective with ease			
combines ideas in novel and unique ways			
adds detail to enhance meaning and interest			

Example	Date

Thinking with Others	1	2	3
demonstrates an ability to empathize and respond to others' thinking			
demonstrates an enjoyment of special humour and comfort in discussing ideas with others			
entertains different or opposing points of view			
communicates effectively with others			

Example	Date

Thinking for Understanding	1	2	3
searches for ideas and data to facilitate understanding			
associates information with past experiences and ideas			
searches for meaningful patterns among concepts			
sorts and reconstructs ideas to create new meanings			
applies new meanings in a variety of ways			
alters goals and processes when gaps or errors are found			
demonstrates the ability to plan, evaluate and monitor thinking			

Example	Date

Thinking to Evaluate	1	2	3
seeks information from several viewpoints			
generates, selects and applies criteria for evaluation			
verifies data and criteria			
recognizes assumptions, fallacies and bias			
approaches decision making and problem solving systematically			
recognizes when evidence is insufficient			
demonstrates an increase in thoughtful reflection			
develops standards for good thinking			

Example	Date

Strengths:

Next Step
– Focus:

Definitions:

1. Directed — Awareness Level
Student demonstration of awareness only when teacher directly assigns or explains.

2. Facilitated — Practice Level
Student demonstration of learning provided as a result of awareness; may be guided by but not necessarily assigned by teacher.

3. Self-directed — Autonomous Level
Student voluntarily chooses to participate in the learning, and shares knowledge and feelings about the process.

Adapted from *Teaching Thinking: Enhancing Learning*, Alberta Education, 1990.

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Appendix 7

Learning Style Profile

Based on Student Responses: Learning Style Inventory
Primary Version (Perrin, 1983)

Student _____ School _____
Date _____ Teacher _____

1. **Sound: a strong preference for having sound present.**

   Establish small-group areas where students may work and talk.

2. **Light**

   Not a critical learning factor.

3. **Temperature: a strong preference for working in a warm environment.**

   Permit students to work in the warmer sections of the room (warmest area is usually the centre of the room); allow the wearing of extra clothing.

4. **Design**

   Not a critical learning factor.

5. **Sociological: preference to working either alone or with peers; working with an adult may actually interfere with learning.**

   Alone
   Provide carrels; place desk and chair away from others; assign multisensory instructional packages, song boards, independent contract activities, programmed learning sequences.

   Peers
   Allow students to work in pairs; use small-group activities; encourage peer interaction; provide small-group work areas.

6. **Structure**

   Not a critical learning factor.

7. **Responsibility and Persistence: a strong need for responsibility and persistence is indicated.**

   Permit choices and options; permit self-pacing and self-checking; provide feedback as needed; assign contracts with wide choice of activity alternatives.

8. **Motivation: appears to be highly self-motivated.**

   Provide a variety of learning resources; permit student-initiated projects and activities; provide praise and encouragement when needed; permit self-pacing and self-checking; provide contracts on a variety of topics.

Appendix 7 (continued)

Learning Style Profile

Based on Student Responses: Learning Style Inventory Primary Version (Perrin, 1983)

9. **Perception: visual/auditory learning styles are indicated.**

   Visual
   Provide films, filmstrips, books with pictures; allow students to work in the media centre and library; encourage visual activities; use visuals (transparencies, chalkboard, charts) when lecturing; emphasize whole word and language experience approaches to reading; assign contract activity packages, high interest multisensory instructional packages, programmed learning sequences (if structure is needed).

   Auditory
   Provide tapes, records, tape-recorded books; allow students to work in the media centre; permit tape-recorded book reports; use discussion and lecture methods; emphasize linguistic reading approaches; assign Contract Activity Packages, and resources accompanied by tapes.

10. **Intake: a strong preference not to have intake while learning.**

    Permit students to choose their own snack time if they wish.

11. **Mobility**

    Not a critical learning factor.

12. **Time: afternoon is the best time for learning; morning is a poor time for learning; evening good for homework/projects.**

    Afternoon
    Assign afternoon reading and math groups; administer tests in the afternoon.

    Evening
    Assign projects and activities to be completed at home.

Appendix 8

Language Learning Environment Indicators

Indicators of a Language-Rich Environment

- Concrete materials are readily available for exploration and use in order to connect meaningful experiences with language.
- A wide variety of books are available for students to read.
- A classroom library exists for students to select books to read, or to share their own interesting books.
- Cozy areas for reading are visible.
- A literature-based language learning environment meaningfully connects student interests and student expression in writing, speaking, viewing and listening.
- Teachers encourage the use of new vocabulary related to a student's selected reading or experiences.
- Students have choices in learning activities and, as a result, can build confidence in voluntarily and enthusiastically reading, writing and speaking with others.
- Paper and writing tools are available to students.
- Students are given many opportunities to write as a natural way to communicate or share meaningful experiences.
- Students are given many opportunities to talk about their interests and experiences with peers and teachers.
- Listening skills are taught as meaningful ways to show care and learning with others.
- A wide variety of print from the environment is available in the classroom — cereal boxes, labels, newspapers, magazines. . . .
- Puppets, musical instruments, art materials, and play areas are available for exploration.
- Physical arrangement includes space for movement and centres for exploration so students view learning as dynamic versus fixed to specific learning areas.
- Students are given many opportunities to use language to predict, speculate, imagine, create and question.
- Student thinking is encouraged through meaningful use of language.
- Students are given many opportunities to express themselves through writing, reading, talking, active listening, art, music and drama or play.
- Student learning is continuously celebrated through display of work in the classroom or school, publication, and sharing with a meaningful audience.
- Teachers (and principals!) model the use of reading, writing, listening, speaking, viewing and play (e.g., puppetry, role play and singing) as meaningful and joyous ways of expressing, thinking and communicating.

Appendix 9

Language Learning Indicators

Developing and Exploring Stages (Approximately Levels One to Three)

Building on previous learning experiences and meaning, the student:

- chooses to explore the various uses of concrete materials and, as a result of the experiences, talks, writes, draws pictures about them, and "reads" or shares the communication enthusiastically with others.
- voluntarily selects books to read or listen to and distinguishes between types of literature — picture books, stories, fairy tales, rhymes.
- draws and "writes" about meaningful experiences and interests. Photographs, field trips, interest areas or holidays can provide meaning and personal interest!
- organizes ideas into units of meaning, which may or may not be marked by capitalization and end punctuation.
- shares favourite books, stories and poems.
- contributes ideas and opinions to a discussion.
- uses non-verbal cues, such as body language or facial expression to extend, enhance or reinforce communication of ideas.
- predicts, speculates, imagines, creates and questions what might happen in a story.
- chooses to play with letters or words.
- notices print in the environment.
- "reads" along with familiar parts of a story or poem.
- recognizes his or her name and other familiar letters or words in print.
- constructs story from pictures.
- rhymes words.
- celebrates the development of ideas by having writing published for a variety of known and unknown audiences.

Note: Please consult the Language Learning component of the *Program of Studies: Elementary Schools*, 1991, for more specific descriptions of learner expectations related to the various levels.

Appendix 9 (continued)

Language Learning Indicators

Independent Stages (Approximately Levels Three to Five)

Building on previous learning, the student:

- selects books to read and distinguishes between types of literature, fiction and non-fiction, by identifying the characteristics of stories, poetry, plays, reports or articles.
- applies knowledge of sounds, symbols, sentence markers, to identify words and retain fluency and meaning in reading.
- recognizes the meanings of words through context or previous understanding.
- uses experience with words that imitate sounds, to assist in reading, writing and speaking.
- uses new vocabulary associated with readings.
- writes and draws to communicate or share meaningful experiences and interests, and shares these with others; e.g., uses conventional formats such as thank you's, invitations . . .
- discusses what he or she has read and written, and talks about personal choices of favourite authors, themes, topics or genres.
- expresses personal or differing viewpoints in a discussion.
- predicts, speculates, imagines, creates and questions what might happen in a story, using pictures or text as clues.
- writes about meaningful experiences and interests.
- listens to stories for enjoyment and information.
- shares favourite books, stories, poems or other writings, and reflects on own writing in terms of favourite words, phrases or sentences used.
- uses a variety of sentence beginnings and sentence structures in writing and speaking.
- responds positively to the writing of peers by pointing out what he or she likes about the content and language used.
- concentrates on creating and expressing ideas in initial writing drafts.
- uses approximate or temporary spellings to keep ideas flowing in preliminary writing drafts.
- edits, adapts, changes or rearranges ideas in subsequent drafts in response to feedback.
- retells or summarizes main ideas from a reading or listening experience.
- classifies or organizes information and ideas, using strategies such as mind-mapping, webbing, etc.
- celebrates the development of ideas by having writing published for a variety of known and unknown audiences.

Note: Please consult the Language Learning component of the *Program of Studies: Elementary Schools*, 1991, for more specific descriptions of learner expectations related to the various levels.

Language Learning Indicators

Skillful Language Use Stages (Approximately Levels Five to Seven)

Building on previous learning, the student

- distinguishes the characteristics of specific genres; e.g., biography, autobiography, historical fiction, science fiction, myth and poetry, news reports, articles.
- speaks and writes about how plot is built around the internal and external responses of the main character/s to the problem or situation, and uses this technique in own writing.
- uses table of contents, chapter headings, index, glossary and bibliography, thesaurus, dictionary and encyclopedia to assist in reading and writing.
- writes and depicts with visuals to communicate or share meaningful experiences and interests, and shares these with others.

  focuses writing on important ideas, themes or concepts, and provides support for the ideas.
- attends to punctuation cues in reading and writing.
- experiments with a variety of language forms and formats to achieve particular effects.
- demonstrates use of words that carry connotations beyond their literal meaning.
- uses experience with figurative language, such as simile and hyperbole (exaggeration for effect) to assist in reading, writing and speaking.
- uses language, such as metaphor, personification and synecdoche to assist in reading, writing and speaking.
- recognizes that idiomatic or colloquial uses of language affect meaning.
- detects writer's or speaker's theme, purpose, point of view, opinions, bias, prejudice, stereotyping, "bandwagonning", humour, feelings, attitudes, mood.
- expresses personal viewpoints that may be contrary to popular or accepted opinion.
- distinguishes and uses the elements of story.
- concentrates on creating and expressing ideas in initial writing drafts, and revises and elaborates on ideas in subsequent drafts.
- develops criteria for assessing the effectiveness of ideas or information through writing, speaking; grammatically correct sentences that have consistent verb tenses . . . logically supported arguments, etc.
- celebrates the development of ideas by having writing published for a variety of known and unknown audiences.

Note: Please consult the Language Learning component of the *Program of Studies. Elementary Schools*, 1991, for more specific descriptions of learner expectations related to the various levels.

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Appendix 10

Continuous Progress in Mathematics Learning

(Based on the 1982 mathematics program, changes will be made to correspond with the new program.)

Problem Solving Across the Levels

Understanding the Problem
Developing a Plan
Carrying Out the Plan
Looking Back

Appendix 10 (continued)

Continuous Progress in Mathematics Learning

(Based on the 1982 mathematics program, changes will be made to correspond with the new program.)

Level Four Math Outcomes
Numeration
Operations and Properties
N1 N2 N3 N4 N5 N6 N7
P1 P2 P3 P4 P5 P6 P7 P8
Measurement
M1 M2 M3 M4 M5 M6
Geometry
G1 G2 G3 G4
Graphing
GR1 GR2 GR3 GR4
Level Five Math Outcomes
Numeration
Operations and Properties
N1 N2 N3 N4 N5 N6 N7 N8 N9
P1 P2 P3 P4 P5 P6 P7
Measurement
M1 M2 M3 M4 M5 M6 M7 M8 M9 M10 M11 M12
Geometry
G1 G2 G3 G4 G5 G6
Graphing
GR1 GR2 GR3 GR4 GR5
Level Six Math Outcomes
Numeration
Operations and Properties
N1 N2 N3 N4 N5 N6 N7 N8
P1 P2 P3 P4 P5 P6 P7 P8
Measurement
M1 M2 M3 M4 M5 M6 M7 M8 M9
Geometry
G1 G2 G3 G4 G5 G6
Graphing
GR1 GR2 GR3 GR4

Problem Solving Across the Levels

Understanding the Problem
Developing a Plan
Carrying Out the Plan
Looking Back

Phyllis Geddert

Appendix 11

Math Outcomes and Student Progress Record

(Based on the adaptation of the 1982 mathematics program for Grade 3, changes will be made to correspond with the new program.)

Name _____ Teacher _____ School _____

Review	Numeration	Activities	1	2	3	Final
	1. Recognizes the order of numbers (0–1 000) and understands ≤ ≥ and = to show relationships.					
	2. Reads and writes numerals (0–999) and identifies and writes these numbers in words.					
	3. Identifies multiples by counting by 2's, 5's, 10's, 25's, 100's, (0–100) forward and backward. Counts nickels, dimes and quarters to $1.00.					
	4. Identifies the number of 1 000's, 100's, 10's and 1's in a number.					
	5. Writes numbers in expanded notation (0–1 000) and vice versa; e.g., 8104 = 8 x 1 000 + 1 x 100 + 0 x 10 + 4 x 1.					
	6. Identifies, writes and compares proper fractions from concrete and pictorial representation (halves, thirds, quarters, fifths and tenths). Begins with concrete materials and progresses to pictorial representations.					
	7. Reads and writes decimals from concrete and pictorial situations (tenths only); e.g. compares decimetres to a metre and centimetres to a decimetre, or $0.10 is one tenth of a dollar.					

Review	Operations and Properties	Activities	1	2	3	Final
	1. Identifies addition, subtraction, multiplication and division situations. Uses pictures to illustrate situations.					
	2. Adds and subtracts two- or three-digit numbers with and without regrouping.					
	3. Symbolizes multiplication and division situations, using both picture examples and word examples.					
	4. Finds the sum or product of 2 or 3 numbers, using the commutative property.					
	5. Identifies related sentences for addition, subtraction, multiplication and division; e.g., 8 + 9 = 17; 9 + 8 = 17; 17 - 9 = 8; 17 - 8 = 9.					
	6. Understands the unique effect of 0 and 1 in addition and multiplication; e.g., 8 + 0 = 8; 6 x 1 = 6; 7 x 0 = 0.					
	7. Demonstrates mastery of basic facts involving sums and minuends to 18, and products and dividends to 45.					
	8. Multiplies whole numbers by 10 and 100 and discovers the pattern for multiplying by 10 and 100; e.g., add 1 or 2 zeros to the given number.					

Review	Problem Solving	Activities	1	2	3	Final
	1. Understands the problem by using actions, interpreting a picture, identifying key words, using manipulatives, asking questions, restating a problem in own words, identifying what is wanted and given.					
	2. Develops a plan by looking for patterns, collecting data (tallied or in pictographs or bar graphs), acting it out, using manipulatives, writing a number sentence, choosing the appropriate operation.					
	3. Carries out the plan by identifying objects (sorting, using data, continuing the pattern, using manipulatives to show solutions, solving using mathematical symbols, performing necessary actions in a problem).					
	4. Looks back by checking groups sorted, discussing solutions, checking the pattern, retelling the problem with solution, accounting for other possibilities, making and solving similar problems.					

Appendix 11 (continued)

Math Outcomes and Student Progress Record

(Based on the adaptation of the 1982 mathematics program for Grade 3, changes will be made to correspond with the new program.)

Name _____ Teacher _____ School _____

Review	Measurement	Activities	1	2	3	Final
	1. Tells and writes the time to the nearest hour, half hour, quarter hour and five-minute intervals.					
	2. Orders months of the year; e.g., the sixth month of the year is _____.					
	3. Reads the Celsius thermometer to one degree intervals and uses the symbol (C). Uses temperatures above and below zero and records and graphs the noon temperature each school day for one month.					
	4. Counts collections of coins up to $1.00.					
	5. Makes purchases and change up to $1.00.					
	6. Extends estimation and measurement to include the use of the standard units kilometre and decimetre with symbols km and dm; e.g., measures a dm and a km on the playground; uses maps where distances are given in km; and finds the distance between cities by addition.					
	7. Uses standard measuring instruments (metre stick, litre container, mass scales, calendar, Celsius thermometer) and includes appropriate units of measure.					

Review	Geometry	Activities	1	2	3	Final
	1. Classifies and identifies 3-dimensional objects and 2-dimensional figures (cube, sphere, pyramid, cylinder and cone, circle, triangle, square, rectangle, pentagon, hexagon and octagon).					
	2. Constructs simple 3-dimensional objects, using modelling clay, plasticine, marshmallows and toothpicks, etc.					
	3. Constructs simple 2-dimensional figures including circle, triangle, square and rectangle.					
	4. Identifies symmetrical figures and draws lines of symmetry on 2-dimensional figures.					

Review	Graphing	Activities	1	2	3	Final
	1. Identifies the axes.					
	2. Collects data, and constructs pictographs and simple bar graphs. Can survey the class for favourite colour, etc., and graph the results. Can use such scales as 1:1, 2:1, 5:1, etc.					
	3. Interprets pictographs and simple bar graphs.					
	4. Locates position of an object on a grid; e.g., column 3, row 2, or across 3, up 2.					

Appendix 12

Task Analyzed Math Learning Outcomes

(Based on the 1982 program for Grade 6, changes will be made to correspond with the new program.)

Numeration Outcomes

Unit 1 — Place Value

	Assessments			Results
	A	B	C	
1. Identifies and names place value of whole numbers up to hundred thousands, using standard and expanded form.	100*	–	–	100
2. Identifies and names place value of whole numbers from millions to billions, using standard and expanded form.	Inc.**	100	–	100
3. Identifies and names place value of decimals to ten thousandths.	Inc.	Inc.	Inc.	Inc.
4. Reads, writes and orders whole numbers to billions, using standard and expanded form.	80	80	100	100
5. Reads, writes and orders decimals to ten thousandths, using standard and expanded form.	80	80	80	80

Unit 2 — Rounding

1. Rounds whole numbers to nearest billions.
2. Rounds decimals to nearest ten thousandths.

Unit 3 — Integers

1. Identifies and orders integers.

Unit 4 — Ratios

1. Reads, writes and uses proportional ratios.
2. Reads, writes and generates equivalent ratios and uses proportion as strategy in problem solving.

Unit 5 — Fractions

1. Expresses tenths, hundredths, thousandths and ten thousandths as fractions and decimals.
2. Expresses halves, quarters and fifths as fractions and decimals.
3. Regroups tenths, hundredths, thousandths and ten thousandths.
4. Expresses fractions and decimals as per cents and vice versa. Solves word problems involving per cents.

Operations and Properties Outcomes

Unit 6 — Addition and Subtraction

1. Adds whole numbers and decimals including estimating.
2. Subtracts whole numbers and decimals including estimating.

* For primary level outcomes, teachers generally prefer to use such designations as "M" for Mastery, and "IP" for In Progress.

** Incomplete — work still in progress.

Task Analyzed Math Learning Outcomes

(Based on the 1982 program for Grade 6, changes will be made to correspond with the new program.)

Unit 7 — Multiplication and Division

1. Multiplies whole numbers, using one-, two- and three-digit multipliers.
2. Multiplies decimals, using one-, two- and three-digit multipliers.
3. Estimates products and checks, using division.
4. Divides whole numbers, using one-, two- and three-digit divisors. Checks, using multiplication.
5. Divides decimals, using one-, two- and three-digit whole number divisors.
6. Divides whole numbers and decimals, using one decimal place divisors with no remainders. Checks, using multiplication.

Unit 8 — Averages and Per Cents

1. Calculates averages and per cents.

Measurement Outcomes

Unit 9 — Area, Perimeter, Volume

1. Finds the perimeter of polygons without using formulas.
2. Finds the perimeter of polygons with using formulas.
3. Finds the area of triangles and rectangles, using formulas.
4. Finds the volume of rectangular solids, using formulas.

Unit 10 — Metric Measurement

1. Understands the uses of metric prefixes, including symbols.
2. Expresses equivalent measures within the units of length, capacity and mass, with symbols.
3. Measures angles.
4. Reads the 24-hour clock and writes equivalent time notation.
5. Reads and determines distances according to scale.
6. Draws diagrams according to scale.

Graphing Outcomes

Unit 11 — Graphs and Ordered Pairs

1. Constructs pictographs, bar and line graphs.
2. Interprets and solves problems, using pictographs, bar, line and circle graphs.
3. Locates coordinates in all four quadrants.
4. Generates and graphs ordered pairs from a given relationship without using negative numbers.

Geometry Outcomes

Unit 12 — Polygons and Symmetry

1. Constructs and draws pyramids, prisms, cones and cylinders.
2. Draws and identifies radius, diameter and circumference.
3. Translates, rotates, reflects and enlarges 2-dimensional figures.
4. Identifies and tests congruency of figures, using slides, flips and turns.
5. Names corresponding sides, vertices and angles of congruent polygons.
6. Identifies and names intersecting lines, parallel lines, perpendicular lines and angles.

Lisa Hilsenteger

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Appendix 13

Continuous Progress Mathematics Report: A Seven-Year Picture

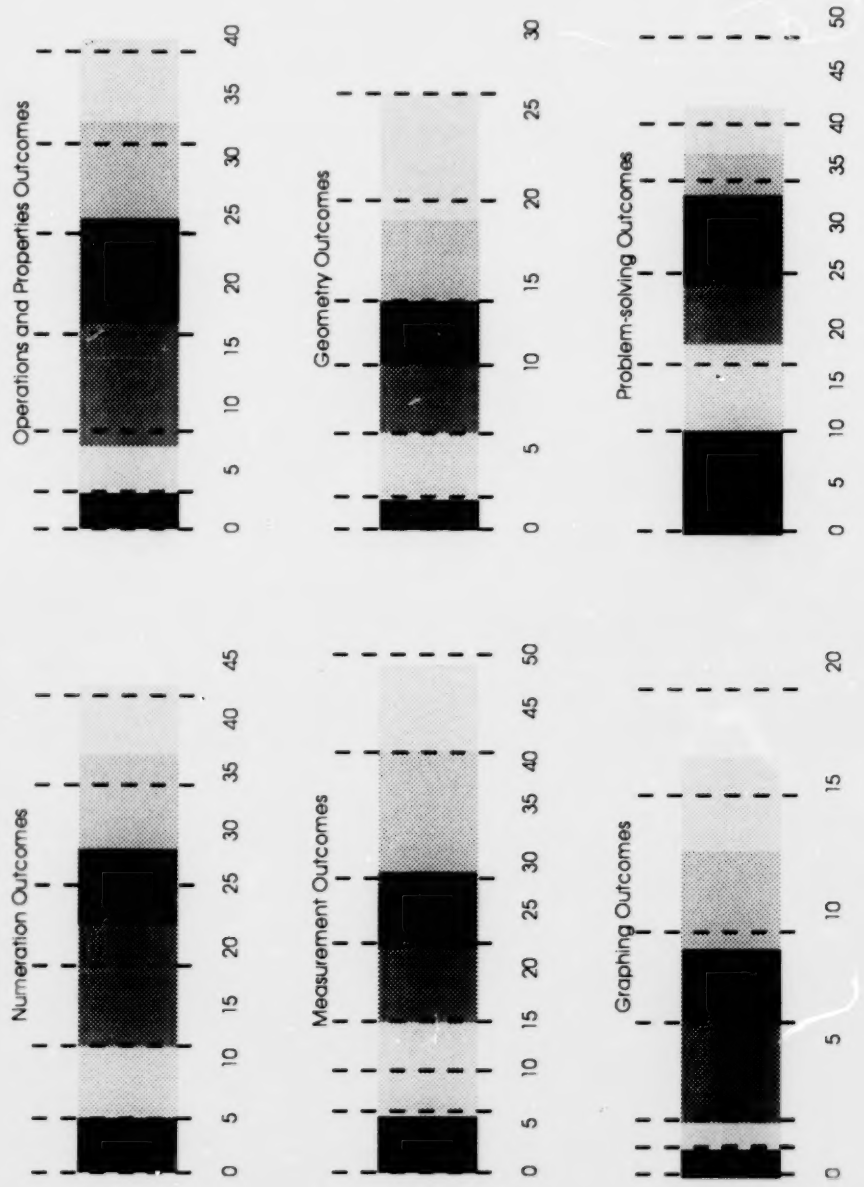
Concepts in Math Learning

(Based on the adaptation of the 1982 mathematics program, changes will be made to correspond with the new program.)

Student Name: Morgan Jessica
Birth Date: 1 / 3 / 80
Themes Studied: Flight, Change, Choices, Family, Leisure, Fitness

Report Date: 21 / 3 / 92
School: St. Gabriel

- Shaded areas represent child's learning progress.
- Dotted lines represent provincial expectations for elementary levels


Operations and Properties Outcomes
0 5 10 15 20 25 30 35 40
Geometry Outcomes
0 5 10 15 20 25 30
Problem-solving Outcomes
0 5 10 15 20 25 30 35 40 45 50
Numeration Outcomes
0 5 10 15 20 25 30 35 40 45
Measurement Outcomes
0 5 10 15 20 25 30 35 40 45 50
Graphing Outcomes
0 5 10 15 20

- Please consult the *Elementary Mathematics Curriculum Guide*, 1982, Alberta Education.
- Learning samples available in portfolios. Please consult with your child's teacher to view/discuss learning progress.

P. Geddert, R. Critchley

Appendix 14

Anecdotal Student Learning Profile — ECS

Student _____ School _____

Date _____ Teacher _____

Self-concept Development

_____ is becoming more self-confident as time progresses. She is also increasing her attention span, especially in the activities of her choice. She is able to pay attention at group time and she is showing increased pride in her work. As she develops confidence, she is becoming more independent, both in structured and free choice activities.

Social and Emotional Development

_____ participates in both large and small group activities. She accepts classroom routines and requirements. She relates well to other children and adults and is becoming aware of her feelings and the feelings of others. She can give a time when she felt happy, sad, afraid and mad. She expresses emotions appropriately. As she plays more with the other children, she is able to share and take turns.

Health and Physical Development

_____ can name the main body parts, including chin, fingernails, elbow, ankle, heel, shoulder, hips, waist and wrist, and understands the functions of our senses. She is able to cut simple shapes accurately and has excellent pencil control.

Intellectual Development

_____ can continue a pattern such as red, green, red, green. She is also able to create a pattern. She can arrange blocks to match a pictured design. She can sort objects by colour, shape, size and other characteristics. She can identify which pile has more, less and equal (the same number of) objects. She can also make a set of objects that is more, less or equal to a given set. She can put objects in order from smallest to largest. She knows the direction of print is top to bottom and left to right. She knows we use words to convey meaning. She can match words that are the same and is starting to find familiar words like my, I and little in a familiar text. She can quite accurately follow the words while she "reads". She is able to copy words and sentences to describe a picture. She can write the following words on her own: "I love my dad and mom". She can read back what she has written and can print her name.

Creative Development

_____ is producing more original products in art as we encourage this development. She is able to use a variety of construction materials. She can draw realistic pictures, and participates in music activities.

Comments

I am pleased with _____ 's progress. She is doing very well in all areas. She likes to help the other children. One day she wanted to be in charge of the art centre. She helped children at the centre and checked off their names as they completed the activity. She enjoys a variety of centres, including reading, writing, listening and sand. Keep up the good work!

Appendix 15

Learner Self-assessment Report

NCR Front Pages (Detachable Sections)

Student _____ School _____

Grade _____ Year _____ Teacher _____

Essential Learning Areas (students choose the focus for each reporting period):

Personal Growth ☐

Creativity ☐

Thinking ☐

Leadership ☐

Communication ☐

- ___ Visual
- ___ Verbal
- ___ Written
- ___ Mathematical
- ___ Musical
- ___ Artistic
- ___ Active Listening
- ___ Movement
- ___ Feelings
- ___ Technology

Essential Learning Areas Based on Learner Goals	First Reporting Period My Comments

Date_____ Student Signature _____ Teacher Signature _____

Essential Learning Areas Based on Learner Goals	First Reporting Period My Comments

Date_____ Student Signature _____ Teacher Signature _____

Appendix 15 (continued)

Learner Self-assessment Report

(These outcomes are provided on the back of a NCR Learner Self-assessment Report. Students may choose an area for each reporting period and report on activities and perceived growth in that area.)

Personal Growth Outcomes

- Explore my aspirations.
- Develop my interpersonal skills.
- Communicate my thoughts and feelings.
- Recognize my strengths and next learning steps.
- Remain confident in my ability to learn and accept challenges.
- Face life positively, with respect and responsibility for self and others.
- Be a lifelong learner.

Creativity Outcomes

- Demonstrate fluency, flexibility, elaboration and originality of ideas.

Thinking Outcomes

- Identify and evaluate the "real" problem.
- Test assumptions.
- Develop research skills so that I can gather more information in order to review, discuss or write knowledgeably about a matter.
- Avoid common errors in reasoning.
- Learn from my "mistakes".
- Check for credibility/reliability.
- Consider all possible causes and results of a given situation.
- Set goals.
- Identify possible obstacles to a goal.
- Choose the best alternative.
- Evaluate the results of the decision.

Communication Outcomes

- Receive information and express myself meaningfully in a variety of ways: visually, verbally, in writing, mathematically, musically, artistically, through active listening, movement and feelings, and through appropriate use of technology.

Leadership and Organization

- Work with and help others work together meaningfully toward a common goal.
- Assume responsibility appropriately.

Appendix 16

Results-Based Lesson Plan

Date _____
Class _____
Theme _____
(Student) _____

Goal _____

Prior _____

Resources:

St. Performance Level:
K ____ C ____ AP ____
AN ____ S ____ EV ____

Organizing the Classroom (Manipulatives, Group Formations):

Instructional Process

Active Involvement Processes:

___ Use of Manipulatives
___ Drawing
___ Speaking
___ Writing
___ Collaborating
___ Viewing
___ Dramatizing
___ Listening

Other _____

Criteria for Success _____

Assessment/s: _____

Closure (Summary of Learning): _____

Expanded Opportunities

Reteaching: _____

Enrichments: _____

Student performance recorded: Yes ____ No ____ Student work placed in portfolio: Yes ____ No ____

Notes:

Phyllis Geddert

Appendix 17

Profile of Results-Based Instructional Practices

Defining the Essential Outcomes

Defining the essential outcomes is imperative to the success of students and the continuous, collaborative improvement of schooling.

- Planning teams consisting of administrators and teachers, with stakeholder support, meet to develop a statement of beliefs about teaching and learning, and to identify essential outcomes.
- Teaching teams discuss and design strategies that will address the varying strengths of each learner within the essential outcomes.
- Records are kept by teachers to document each child's progress from level to level.
- Communication to students and parents regarding student learning progress is continuous and need not be driven by the calendar.
- Collegial planning occurs within and across levels to ensure continuous learning opportunities for students.
- The essential outcomes "drive" all school activities and priorities.
- Program, course, unit and lesson plans are collaboratively developed, with a focus on the essential outcomes.
- The school's research and data collection process is aligned with the essential outcomes.
- Since improvement occurs over time, a long-term vision for growth is adopted.

Profile of Results-Based Instructional Practices

Focusing on Outcomes and Student Progress

Maintaining a clear focus on outcomes and student progress within those outcomes promotes learning.

- Essential or exit outcomes are clearly communicated to students and parents.
- Student "can do" strengths and interests provide diagnostic information regarding each child's learning progress and must be addressed in the teaching process.
- Beliefs that students can learn all the outcomes and demonstrate success at high performance levels are clearly communicated to students.
- Essential and curriculum outcomes are clearly communicated to students.
- All learning activities and choices available to students are aligned with the essential outcomes.
- Students complete the learning activities successfully in order to "qualify" for assessment or credit.
- A variety of assessments are employed to allow learners to demonstrate success within the essential outcomes.
- Criteria for credit is clearly established with students.
- Demonstrations of success within the essential outcomes are recorded for each child and provide a picture of each child's learning progress.

Profile of Results-Based Instructional Practices

Allowing Appropriate Time and Support for Learning

Appropriate time and support for learning promotes success.

- Since students learn in different ways and at varying rates, they are provided the time and support they need for learning.
- The teacher's and school's process of support is clearly communicated to students and parents.
- The various ways in which students learn are addressed during instruction, to give students a better chance to learn a concept well the first time.
- Students have more than one chance to learn a concept.
- Credit for learning is provided when learning is demonstrated successfully.
- Distributed practice is incorporated into the learning process to promote retention of previous learning.
- Parallel assessments are not less difficult nor more difficult than the original opportunity.
- Time and support for learning are provided through reteaching in a new way appropriate to the child's learning style, and by allowing a child to progress through the continuum if success has been demonstrated.

Having High Expectations for Success

High expectations for the success of all students promotes their learning.

- Teachers hold high expectations for all students to demonstrate success of the essential outcomes.
- Each child's learning is documented when success is demonstrated.
- Criteria for credit is clearly understood by students.
- High expectations are accompanied by appropriate support for each child's learning.

Appendix 17 (continued)

Profile of Results-Based Instructional Practices

Providing Appropriate Feedback to Students

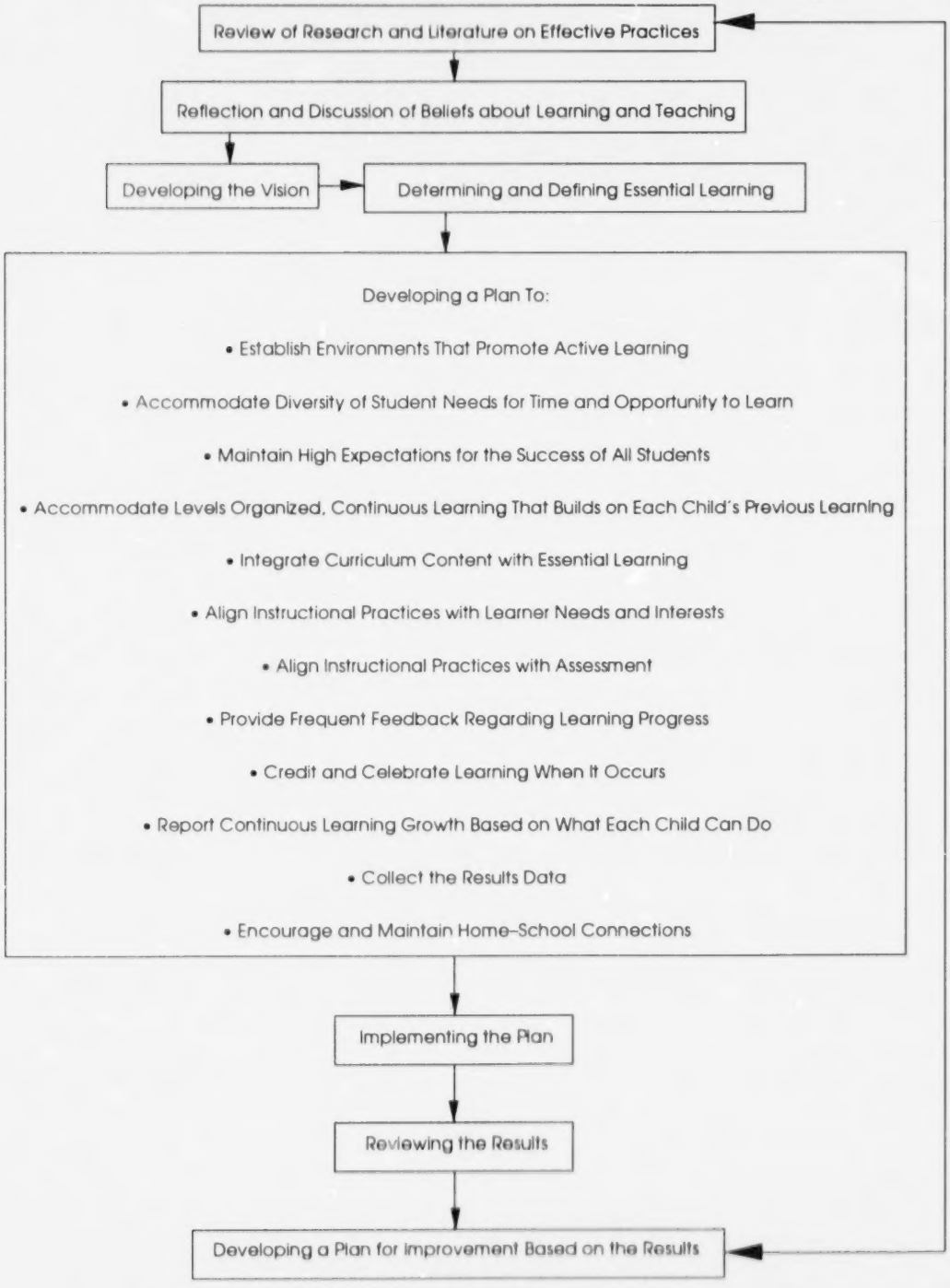
Providing appropriate feedback to students encourages continuous learning.

- Teachers monitor each child's learning progress and provide frequent feedback regarding progress within the essential learning outcomes.
- Instruction and feedback is criterion-referenced, or based on the criteria for successful performance.
- Students are informed about their learning styles so they are aware that their learning preference is a strength.
- Praise is used to encourage young learners, with specific feedback provided so that students know what they did well.
- Student work that is not done well is returned, while maintaining beliefs that each child can perform well. The teacher and the learner discuss ways in which the performance could be improved.
- Feedback regarding student learning is continuous.
- Students know what they "can do" and know what the next learning steps are, because the teacher provides clear communications for the continuous learning process.

Phyllis Geddert

Appendix 18

Collaborative Planning for Educational Improvement


Review of Research and Literature on Effective Practices
Reflection and Discussion of Beliefs about Learning and Teaching
Developing the Vision
Determining and Defining Essential Learning
Developing a Plan To:
• Establish Environments That Promote Active Learning
• Accommodate Diversity of Student Needs for Time and Opportunity to Learn
• Maintain High Expectations for the Success of All Students
• Accommodate Levels Organized, Continuous Learning That Builds on Each Child's Previous Learning
• Integrate Curriculum Content with Essential Learning
• Align Instructional Practices with Learner Needs and Interests
• Align Instructional Practices with Assessment
• Provide Frequent Feedback Regarding Learning Progress
• Credit and Celebrate Learning When It Occurs
• Report Continuous Learning Growth Based on What Each Child Can Do
• Collect the Results Data
• Encourage and Maintain Home–School Connections
Implementing the Plan
Reviewing the Results
Developing a Plan for Improvement Based on the Results

Phyllis Geddert

Response Sheet

Every Child Can Learn: Accommodating Differences in Elementary School

Please check to indicate the following.
My position is:

☐ Teacher: ☐ Division 1 ☐ Division 2

☐ School Administrator: ☐ Division 1 ☐ Division 2

☐ System Administrator

☐ Other (please specify) _____

I found this document: ☐ extremely useful ☐ somewhat useful ☐ useful ☐ not very useful

Please respond to the following questions.

1. Are the format and organization of this document easy to follow? ☐ yes ☐ no

2. What part(s) of this document are likely to provide the most assistance to you in accommodating students' differences in learning?

_____

_____

3. What part(s) of this document need clarification?

_____

_____

4. What could be added or changed to make this document more helpful?

_____

_____

5. What other projects or initiatives do you feel Alberta Education could make available to educators?

_____

_____

Thank you for your feedback!
Please send your response to:

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ECS/Elementary Unit
Alberta Education
11160 Jasper Avenue
Edmonton, Alberta
T5K 0L2